The American Economic Review

VOLUME XXXII DECEMBER, 1942 NUMBER FOUR

ASPECTS OF THE BASING-POINT SYSTEM

By Arthur Smithies

Although discussion of price policy in a single industry may seem at first sight a peacetime activity which might well be suspended in the face of the urgencies of the present, the fact remains that price controls are now general and at least some of them will carry over into the post-war economy. Unless all discretion as to price policy is to be taken away from private industry, it seems to me that an understanding of the operation of existing pricing practices is even more important now than it has been in the past.[1]

It may seem surprising that, with the imposing array of economic talent that has addressed itself to the problem, the basing-point system has not already been exhaustively analyzed. But it has not, and this is due I think to the antitrust legislation which has centered controversy on the question whether the basing-point system is monopolistic or competitive in nature rather than directed attention to an explanation of its operation. Moreover, the legalistic method of examining witnesses before the Federal Trade Commission limits them to opinions on the question of "competitiveness" and does not give them an opportunity for extensive analysis. Consequently, much testimony is devoted to showing that the practices of the basing-point industries do not conform to those of industries, *e.g.*, agriculture, which are generally regarded as competitive, and do bear some resemblance to practices, international dumping, for instance, which are generally regarded as monopolistic.[2]

Editor's Note: The author has resumed his teaching duties as associate professor of economics at the University of Michigan, after serving during the summer as consultant with the British Empire Division of the Board of Economic Warfare in Washington.

[1] I am very grateful to Professor I. L. Sharfman and Professor Fritz Machlup for reading the manuscript of this paper and making many valuable suggestions for the more effective presentation of the subject matter. I have followed their advice to the best of my ability, but I am afraid I have not achieved the simplicity of exposition that they recommended. I must therefore crave the reader's patience with what is essentially a difficult subject.

[2] The transcript records of the hearings in the Cement Case now before the Commission are most illuminating in enabling the economist to evaluate the usefulness of legal methods

These analogies are no doubt instructive, but they do not lead to a solution of the problem of the mechanics of the basing-point system.

The methods employed before the Commission may be judged by the results to which they lead. In the Cement Case before the Commission in the fall of 1942, counsel for the Commission states: "If a single corporation owned all the mills and attempted to operate them, that is just what it would do to prevent them from competing with each other. Such a monopoly would act just as respondent manufacturers under separate ownership are acting when they use the [multiple] basing point system."[3] This statement is incorrect. A monopolist would never adopt the basing-point system, since he could always increase his profits by leaving the price pattern unchanged and eliminating cross-hauling. It follows that if, as is contended by its opponents, the existence of the system implies collusion, it is collusion short of complete agreement. On the other side, it is contended for the respondents in the Cement Case: "The term [imperfect competition] has no relation to monopoly, does not shade into monopoly. . . . It is a natural phenomenon and is the inevitable form of competition in all manufacturing industry. It is entirely consistent with free competition and does not imply less or weaker competition, since it is frequently more keen and vigorous than 'perfect competition' would be."[4] Suffice it to say that no economist would endorse this statement; but the statement was made by learned counsel who had heard the testimony of a galaxy of economic talent.

Convincing evidence can certainly be adduced that the basing-point system neither conforms to the economist's ideal of perfect competition, nor to his anathema, pure monopoly. But surely it is obvious that the monopoly-competition controversy from an economic point of view is barren, since the basing-point system involves imperfect competition, containing elements both of competition and monopoly; and to abolish the basing-point system and require, say, f.o.b. mill pricing would merely substitute one form of imperfect competition for another. This is the point of view of J. M. Clark[5] and M. G. de Chazeau.[6] Although these writers have clearly recognized the nature of the prob-

---

for getting to the heart of economic problems. For a digest of the economic evidence, see the Commission's Brief (Docket No. 3167), Part II, pp. 69 *ff.*, and the Respondent's Brief (Docket No. 3167), pp. 330 *ff.*

[3] Commission's Brief, Part I, p. 9.

[4] Respondent's Brief, p. 347.

[5] "Basing Point Methods of Price Quoting" *Can. Jour. of Econ. and Pol. Sci.* (Nov., 1938), p. 477.

[6] Daugherty, de Chazeau and Stratton, *The Economics of the Iron and Steel Industry* (New York, 1937).

lem and have contributed valuably to explaining the *raison d'être* of the basing-point system, they have not sought to explain the process of determination of the base prices themselves. It is with that problem that this paper is chiefly concerned. We shall be concerned only with problems of explanation, and not with public policy.[7]

In Section I we shall discuss a multiple basing-point system where there are two identical competitors, or two identical groups of competitors situated symmetrically at each of two points in a uniform linear market. In Section II the assumptions of identity, uniformity and symmetry will be relaxed, while in Section III we shall consider the problem of non-base mills.

In Sections I and II it seems desirable not only to determine equilibrium conditions for a multiple basing-point system, but to compare the results with those that would have obtained had the industry concerned sold on an f.o.b. mill basis, on the one hand, and as a single, unregulated monopolist on the other. In Section III our concern will be chiefly with the problems of new firms entering the industry and our main interest will be in comparing the situation of a new non-base mill with that of a mill which establishes a new basing point at its production point.

In order to achieve definite results, we must necessarily be concerned with simplified models. Although the results naturally cannot be proved to be valid for more complicated situations, I do not see any reason why the general principles which govern the behavior of the simple models should not apply in more complicated cases. Although our problem can best be handled by mathematical methods, I shall attempt to state the argument verbally, in view of the interest of the subject for non-mathematical economists. However, where the verbal argument needs to be supplemented, I shall include mathematical proofs in an appendix.

I

The Multiple Basing-Point System. Let us assume that there are two producers A and B who attempt to maximize their profits in a linear market of finite length, producing a uniform product for which there is a known demand curve, relating price to quantity sold, at every point of the market, such that quantity is a decreasing function of price and that the second derivative is of the same sign for all relevant prices; that is, the demand curve is either concave, convex, or linear throughout its whole length. This is a sufficient but not a necessary condition for the assumptions of decreasing marginal revenue that will be

[7] By this I mean I shall not attempt to answer the question whether the basing-point system should be retained or abolished. We shall necessarily be concerned with the validity of arguments that have been advanced for the abolition of the system.

made in the course of the argument. I shall assume also, as is in fact the case for the chief basing-point industries,[8] that marginal costs for each producer are constant. I shall further assume that each mill is a basing point, so that the delivered price at every point in the market is computed by adding to the price charged at the nearest basing point the freight cost from that basing point to the point of delivery. I shall assume that the freight rate is uniform per unit of distance and that its relation to the demand conditions is such that sales are made by one or both producers at every point of the market. Lastly, I shall assume that a producer will not make sales that do not cover his marginal costs plus freight to the point of delivery. The situation can best be illustrated by the following diagram:

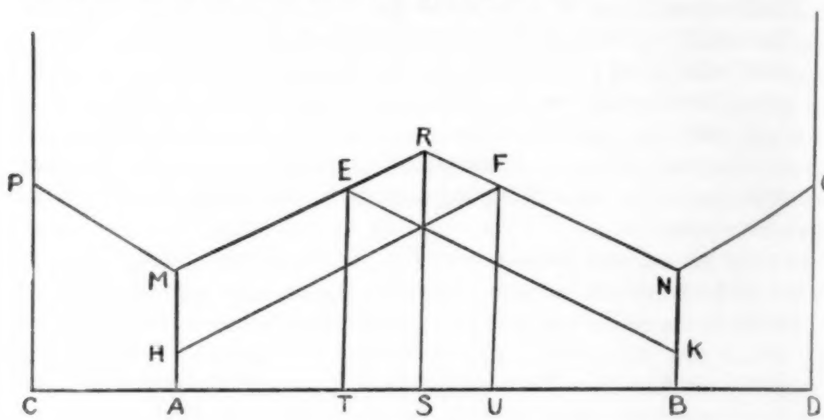


FIG. 1

CD represents a linear market and A and B the positions of producers A and B respectively. AM and BN are their respective base prices, p_1 and p_2. The lines MP and MR show delivered prices based on A, while NR and NQ show those based on B. The slopes of these delivered price lines will depend on the freight rate. AH and BK are the (constant) marginal costs of the two producers; the lines HF and KE, obtained by adding freight to these marginal costs, will show the minimum delivered prices that each producer is prepared to accept. If these lines intersect RN and RM at distances SU and ST from S, then producers A and B will sell exclusively in the regions CT and UD and will share the region TU. Except where otherwise expressly stated, we shall assume that if the market at any point is shared by A and B, it is shared equally. If HF and KE do not intersect RN and RM, but NB and MA, then each producer can make sales at more than

[8] See Clark, *op. cit.*, p. 478.

marginal costs over the whole market, which will consequently be shared.

Producer A will then realize uniform mill-nets in respect of his sales in the region CS. For any sales he may make in the region SB he will realize a mill-net equal to his base price less twice the freight cost from S to the point of delivery; that is, he will absorb twice the freight cost from S to the point of delivery. If he also sells in B's hinterland BD, he will, in respect of those sales, absorb twice the freight cost from S to B. The same thing holds, *mutatis mutandis,* for B.

The assumptions we are making in this section imply that CA = BD, AH = BK, and the demand curve at every point of the market is the same. In this case we can, without loss of generality, assume that CA and BD are zero; this is, that the competitors are situated at the ends of the market. It follows from considerations of symmetry that where the competitors are identical in this sense, and where their expectations of each other's behavior is the same, their equilibrium prices and profits will be equal.[9]

Degrees of Competition. I shall preface the argument by recording agreement with the point of view that the basing-point system is inconsistent with perfect competition. If A and B consist of groups of competitors, whom we must assume to be producing at increasing marginal cost, sufficiently large for each competitor to believe that his own action will have no effect on the market price, it is obvious that any competitor situated, say, at A will believe that he can realize higher mill-nets on sales in AS than in SB, so a determinate equilibrium will be established with each producer realizing equal mill-nets on every unit of output and competition will equalize mill-nets as between producers.[10]

In the basing-point system, as in other cases of imperfect competition, the equilibrium position is indeterminate unless the conjectural assumption which the competitors make as to each other's behavior is known. In the present case it seems most reasonable to assume that these assumptions will concern price reactions and, in the case of identical competitors, it seems reasonable to assume that the conjectures that are made will fall between the extreme situations where each

[9] If any reader objects that this model is too abstract to be useful, I reply that it is no more abstract than the hypothetical questions which are formulated for the consideration of expert witnesses before the Federal Trade Commission. It is on the basis of answers to these questions that the Commission presumably makes up its mind.

[10] This conclusion depends on the usual assumptions of perfect competition; in particular, on the assumption that the whole quantity offered for sale will in fact be sold for what it will fetch. If, however, the market price is not adjusted instantaneously to supply, producers at A may attempt to dump their surplus products in SB, and similarly for producers at B. But if the remaining requirements for perfect competition are met, this situation can only be of transitory significance.

competitor assumes that his rival will set a price equal to his own, on the one hand, and where each expects that his rival will hold his price unchanged, on the other. These extreme cases I have elsewhere termed "quasi-coöperation" and "competition."[11] Although in general the conjectures that are actually made probably lie between these limits in the sense that a competitor will expect his price changes to be met at least partially, the nature of the problem can be best demonstrated by considering the extremes.

Quasi-coöperation. Let us therefore consider first the case of quasi-coöperation. In the basing-point problem, this will imply that when either competitor sets a base price he will expect his rival to set an equal base price.

It was shown in the f.o.b. paper that, if the two competitors sold on a uniform mill-net basis and acted as quasi-coöperators, they would charge the same prices and would jointly realize the same (equal) profits as would a monopolistic owner of the two plants who restricted himself to selling of an f.o.b. mill basis.[12] The reason for this is that each competitor assumes that he can gain no new territory through price cutting, but must be content with maximizing his revenue in half the market. Therefore, he will charge the ideal monopoly price in his half of the market. It is obvious in this case that f.o.b. mill selling is more profitable than basing-point selling, since as we have already seen, the mere existence of the cross-haul assumes that the total basing-point profits of the two producers must be less than the two-plant monopolist's profits. Also on our present assumptions that the competitions are identical, we can conclude that in equilibrium their profits will be equal. Hence we can conclude that, in quasi-coöperation, they will have neither a joint nor a several interest in preferring the basing-point system to f.o.b. mill selling.

Next let us consider the (equal) prices that will be charged by the two producers after they have had time to reach an equilibrium position. Throughout this paper, I shall describe the maximization profits as a process by which each producer sets a price such that his (expected) net marginal revenue, with respect to his mill price, is equal to zero. By "net marginal revenue" I mean the total increment to receipts less the increment to freight costs and prime costs arising from a small change in the mill price. So far as costs are concerned, this merely means that we work in terms of the net prices MH and NK in Figure 1, rather than the total prices AM and BN.[13]

[11] "Optimum Location in Spatial Competition," *Jour. of Pol. Econ.*, Vol. XLIX (June, 1941), pp. 423-39. I shall refer to this paper as the "f.o.b. paper."

[12] This qualification is of course important. See my paper "Monopolistic Price Policy in a Spatial Market," *Econometrica*, Vol. 9 (Jan., 1941), pp. 63-73.

[13] Since the problems we are concerned with involve price adjustments, it seems preferable

For such a position to be a maximum it is clearly necessary that, in the neighborhood of the equilibrium point, marginal revenue must be decreasing as the price increases. Our assumptions as to the shape of the demand function will ensure that this condition holds over the whole price range.

Now what will be the behavior of the quasi-coöperator under the basing-point system? It is clear from Figure 1 that if producer A expects p_2 to be equal to p_1, this implies that he will expect TS and SU to be equal; that is, his total expected sales corresponding to a given base price will be equal to those of an f.o.b. mill seller. Hence he is interested in the same marginal revenue before any deduction is made for freight as the f.o.b. seller, but his marginal revenue net of freight must necessarily be different because of the effects of the cross-haul. It may be seen from Figure 1, that an increase of p_1 and p_2 will increase both TS and SU, that is, the distance over which cross-hauling takes place will increase; this factor will tend to decrease marginal revenue net of freight as compared with the f.o.b. case. On the other hand, an increase of base prices will reduce sales per unit of distance in TS and SU, and so reduce the amount of cross-hauling done. Consequently, for this reason marginal revenue net of freight will tend to be greater than in the f.o.b. case.

Which of these two conflicting influences on net marginal revenue is the greater depends on the elasticity of the relevant region of the demand curve. The more elastic the demand curve, the greater will be the second influence, and *vice versa;* and net marginal revenue may be greater or less than in the f.o.b. case. Consequently the equilibrium basing-point prices may be greater or less than the equilibrium f.o.b. prices, depending on the shape of the demand curve. If, however, demand and cost conditions are such that each competitor sells over the whole market, the influence of changes in the area over which cross-hauling occurs will be absent, and it follows that in equilibrium the basing-point system will yield higher prices than f.o.b. mill pricing. Equilibrium may be possible in either of these situations; and it is consistent with the assumptions of quasi-coöperation to say that the competitors will choose the more profitable of the two possible equilibrium positions.

Thus we reach the conclusion that in the case of quasi-coöperation

to pursue our analysis in terms of marginal price revenue rather than the more conventional marginal quantity revenue. This change requires some slight readjustment on the part of the reader; in particular, where marginal quantity revenue is positive, marginal price revenue is negative, and *vice versa.* In what follows we shall have to consider relative marginal revenues under various pricing policies since, in equilibrium, net marginal revenue (as above defined) must be decreasing, and since it follows that if marginal price revenue at any price is greater under price policy A than under price policy B, the equilibrium price will be greater in the former case than the latter.

the basing-point system will result in lower profits to the producers and higher or lower prices to the public than either complete monopoly or the f.o.b. mill system. The question then arises: Is it conceivable that the basing-point system would be retained in these conditions? The answer is, I think, that a basing-point system would never be adopted by identical quasi-coöperators, but if that system had been adopted for some reason in the past, it could and would continue under quasi-coöperation unless and until there were an agreement to eliminate it. For neither producer could expect the other to follow him in eliminating freight absorption in the absence of an agreement. However, it seems highly improbable that such an agreement would not be made. In this case we therefore have a possibility of collusion not to establish the basing-point system, but to abolish it.

Price Competition. In price competition each producer makes the assumption that when he changes his own base price his rival will hold his price unchanged. The essential difference between this case and quasi-coöperation is that a competitor will expect a price change by him not only to affect his revenue within a given area, but also to affect the size of the area which he expects to occupy exclusively.

If the producers are selling on an f.o.b. mill basis, it has been seen in the f.o.b. paper that producer A will, in this case, expect to increase the distance AS, that is, enlarge his total market area by a price cut. Thus each competitor will have a greater inducement to cut prices than in the case of quasi-coöperation. That is, each competitor's expected net marginal price revenue at a given price will be less in the case of price competition than quasi-coöperation. Consequently, price reductions will be carried further, and equilibrium established at lower (equal) mill prices than in the cases of quasi-coöperation or two-plant monopoly.

The basing-point case is somewhat more complicated and two situations must be distinguished. (1) As we have seen, if the base prices are sufficiently high relative to the cost of transport over the whole market plus marginal costs, the two sellers will share the whole market. (2) If, however, the base prices are sufficiently low, we have the situation depicted in Figure 1, where A and B occupy, respectively, AT and BU exclusively. Either of these situations may characterize the equilibrium position, depending on the nature of the demand curve.

(1) If the producers are both charging prices such that the first case obtains, small changes in price will not affect the market area of a producer, since by definition they are both sharing the whole market. The only change possible is that, if B's price remains unchanged, A, by cutting his price, can increase the region AS in which he sells f.o.b. mill at the expense of the region BS in which he absorbs freight. How-

ever, if the price adjustments are small, as they will be in the final stages of the process of attaining equilibrium, this will have a negligible effect on profits and is, therefore, irrelevant to the determination of the equilibrium position. We are therefore left with the conclusion that the equilibrium position will be determined by each producer attempting to maximize his profits in half the market. That is, they will act jointly as a single monopolist and the result of price competition will be identical with that of quasi-coöperation.

(2) An equilibrium position, however, may not exist with both producers selling over the whole market, so that we have to consider our second case where each producer sells in only part of the market, as shown in Figure 1. In this case a seller still cannot enlarge his total selling region by a price change, for U which marks the end of A's region is independent of A's price, being determined by B's price and A's marginal costs. Moreover, a small shift in the point S is again of negligible importance. But A can, by a price cut, reduce B's territory since his price cut will shift the point T to the right. In other words, A can increase the region in which he is selling exclusively and reduce the region in which he only makes half the sales.

In this case it may be shown[14] that net marginal price revenue is always greater than in the case of f.o.b. mill selling, which, together with our assumption that equilibrium exists, implying decreasing net marginal revenues, requires that the equilibrium base prices are greater in the basing-point case than in the f.o.b. mill case. On the other hand, when we compare this basing-point equilibrium with the monopoly position, no definite conclusion is possible. The possibility of driving his competitior out of part of the market will contribute to making marginal price revenue less in the basing-point case than in the monopoly case. But with the general type of demand curve we are assuming, the fact that the nearer parts of his market, which he occupies exclusively, are more important to a producer than the remoter parts which he shares will make for a higher mill price than in the monopoly case, since in the former case it will be more profitable than in the latter to charge a smaller-than-optimum delivered price near his mill in order to increase distant profits. Which of these conflicting influences on the equilibrium price will prevail is uncertain, and the prices under the basing-point system may be greater or less than if the two plants were in the hands of a single monopolist.

So far we have assumed that an equilibrium position may exist *either* with both producers sharing the whole market *or* with them sharing only part of the market. It is, however, possible that two alternative equilibrium positions could exist simultaneously, one at high

[14] See Mathematical Appendix.

prices with both producers selling in the whole market, the other at lower prices with the producers sharing only part of the market. Although one of the equilibria will doubtless be more profitable for both producers than the other, it seems, in contrast with the case of quasi-coöperation, inconsistent with the independence of action implicit in the notion of competition to say that they will choose the more profitable of the two. Which final position is adopted depends, I think, on the initial prices in the adjustment process. Since the competitors are identical, it may be assumed that their initial prices are identical and the equilibrium that will be finally reached will depend on the direction in which it is profitable for both producers to move from the initial position. There will presumably be one critical initial position where the producers would expect to increase their profits by movements in either direction, in which case we may suppose that they will choose the direction which yields the greater marginal revenue.

We turn next to a comparison of profits. As we have seen, the basing-point profits of each producer are always less than they would be if the two plants were operated by a single monopolist. Whether or not the basing-point system is more profitable than f.o.b. mill pricing depends on the cost of transport over the length of market in relation to the shape of the demand function at every point. This may be seen by considering two extreme cases. First, suppose the freight rate were zero. Then two basing-point producers would charge the monopoly price and would make monopoly profits. Such profits are, *ex definitione*, greater than the f.o.b. profits, which in this case, as a matter of fact, would be zero. On the other hand, it has been shown in the f.o.b. paper[15] that the cost of transport may be sufficiently high for two f.o.b. mill sellers to act as single monopolists in their own halves of the market. In this case f.o.b. profits would be, *ex definitione*, greater than basing-point profits. We may conclude therefore that there is a critical value of the cost of transport below which the basing-point system is more profitable than the f.o.b. system and above which the reverse holds.

We may now summarize the discussion of price competition. Where two identical producers engage in price competition, the basing-point system will reduce expectations of the profitability of price cutting so that the final equilibrium base prices will in all cases be greater than those prevailing under f.o.b. mill pricing; and they may be greater than those set by a single monopolist. These higher prices will result in higher profits than in the f.o.b. situation if the freight rate is sufficiently low. The upshot of it is that, for identical producers, the basing-point system is a clumsy but automatic device for protecting the

[15] Smithies, *Jour. of Pol. Sci.*, Vol. XLIX (June, 1941), p. 435.

competitors from their own self-destructive tendencies.

Conclusions as to Identical Competitors. In the discussion thus far, I have assumed the basing-point system to exist, but have made no attempt to explain how it would come into being. It is hardly conceivable that it could be adopted by express agreement among the producers. In his testimony in the Cement Case, Professor Viner said: "In thinking about the structure, I have not been able to see how you could design any worse one, from the point of view of the national economy, assuming you had free choice."[16] I am inclined to think that two identical competitors would be as reluctant as would Professor Viner to enter into an agreement to establish the system. The chief possibility for the development of the system seems to lie in one competitor, say, A, thinking that he can sell in SV on a freight absorption basis but that he will not provoke retaliation from B. But where A and B are identical, such an expectation certainly seems more than optimistic. On the other hand, once the system was established, neither competitor could afford to abandon his freight absorption sales unless he expected his rival to do likewise, so that the basing-point practice could continue to exist, even though both producers realized they were better off without it, because neither might be prepared to take the initiative for an agreement to abolish it. These considerations are sufficient to explain why mutual invasion should occur and persist. But why should delivered prices be identical at any point where both competitors are making sales? This is understandable if it is assumed that A realizes that, since B is in a stronger position than he is in the region SU, he would probably lose any price war that developed; and that B feels the same way about A.

It must be obvious that our analysis has not provided a convincing *raison d'être* for the basing-point system, although I hope it has thrown some light on the mechanics of the system and on the validity of indiscriminate allegations that collusion is implicit on the system. This negative result contributes to my belief that the existence of the system depends chiefly on its possibilities in giving advantages to some competitors at the expense of others. Where the competitors are identical such possibilities do not exist; and it follows therefore that a major part of our explanation must depend on the extent to which the assumptions that we have hitherto made are not fulfilled. It is to this question that we now turn.

II

The assumptions that we have hitherto made and now propose to relax are as follows:

[16] Commission's Brief, Part II, p. 70.

1. Marginal costs for both producers are equal.
2. If the two producers share any part of the market, they share it equally.
3. The demand function at every point of the market is the same.
4. The producers are situated symmetrically with respect to the ends of the market.

We shall now consider in order the cases where these assumptions are not fulfilled.

1. *Unequal marginal costs.* Let us assume that marginal costs for B are at a higher constant level than for A.

It will be well to begin the discussion by considering the appropriate adjustment if the two producers were selling on an f.o.b. mill basis. If A and B make the same assumptions as to each other's behavior, it follows from general principles of imperfect competition analysis that equilibrium will be attained with B charging a higher price than A, but the margin between B's mill price and his marginal costs is smaller than for A. Any revision of the conjectural assumptions on the basis of experience will be in the direction of convincing the competitors that A is a lower-price setter than B, and such revision will tend to reinforce the tendency toward disparity of the margins of mill price over marginal costs.[17]

Now, as we have seen, in any f.o.b. equilibrium situation, it would be profitable for one producer to absorb freight in order to sell into his rival's territory, provided he thought his competitor would not retaliate. If the margin between B's mill price and his marginal costs is smaller than A's, A can rely on SU being greater than ST and the marginal cost difference may be sufficiently great to make it profitable for A to sell in SU, even though he expects B to share his market ST. But might B retaliate by reducing his mill price in order to drive A out of part of SU? He may not. It may be more profitable for B to exploit the territory UD that remains to him exclusively by charging higher prices than to try to repel A's invasion. But even if B does retaliate by cutting his base price, the marginal cost difference may be sufficiently great to preserve A's advantage, and, therefore, to preserve A's interest in the basing-point system. We thus have a more solid possible explanation of the basing-point system than those advanced for cases where the competitors were identical. For, whereas in those cases our explanation rested largely on assumptions that A and B made mistakes as to each other's behavior, we have here a case where it is to the interest and within the power of A, acting with perfect foresight, to force B to acquiesce in adopting a basing-point system.

[17] I am of course assuming that the difference in marginal costs is not sufficient to make it possible or profitable for A to cut B out of the market entirely.

2. *Unequal shares in the market.* When we abandon the assumption that any point of the market is shared equally by A and B, if it is shared at all, we may do so in two ways. First, we may assume that A and B consist not of single producers, but of unequal groups of identical producers. Then if there are n such producers, the same probability argument that led us to assume that two producers would share the market equally would lead us to assume that where there are n producers each would make $1/n$ of the total sales at any point where they all did in fact sell.[18]

The second way in which sales at any point may not be shared equally by A and B is where the market is imperfect. Now the existence of uniform delivered prices implies that the market is substantially perfect as to price. That is, if prices are unequal, the whole demand at any point will be supplied by the producer charging the lower price. But that does not imply that the market may not be imperfect as to some other factor, such as reputation of the producer for prompt delivery, business connections, and so forth. Differences between A and B in these respects will in general result in unequal sharing of the market.

Let us assume then that A, denoting either a single producer or a group, will obtain more and B less than half the sales at any point where they charge equal prices; but if either A or B sells in any point exclusively, let us assume that at given prices their sales would be the same; and in order to isolate this phenomenon, let us assume that the marginal costs of A and B are constant and equal. Our analysis of this case follows very much the same lines as that of marginal-cost differences. If the two sellers are selling on a uniform mill-net basis they will obviously share the whole market equally, and will make equal profits—provided they make the same assumptions as to each other's competitive behavior. Then if A can occupy a sufficiently large share of any market in which he sells, it will be profitable for him to invade B's territory on a freight absorption basis, notwithstanding any retaliation that B can profitably undertake. Thus it will be to A's interest and to B's disadvantage to substitute a multiple basing-point system for the uniform mill-net system. Again, we have a plausible explanation of the system, which, in fact, may be relevant to the cement industry which has a large concentration of producers in the Lehigh Valley. But if our

[18] This assumption is not without its difficulties, for the n producers must be assumed to be distinct from each other in some special sense. For suppose there were but two producers sharing a market equally, and then suppose one of them merely published and distributed two catalogues, it would seem to follow from our argument that he would immediately capture two-thirds of the market. The difficulty could be avoided, however, if we assume that, if this were possible, each competitor would realize that his rival could do the same thing, so that they agree tacitly only to publish one catalogue each.

reasoning is correct it affords small comfort to those who allege that the existence of the basing-point system implies collusion between A and B.

3. *Non-identical Demand Functions at Every Point of the Market.* Here there are three situations to consider: (1) The demand may be more concentrated near the center of the market than near the points of production; (2) concentration at the ends may be greater than at the center; (3) demand may be more concentrated in the vicinity of A than in the vicinity of B. By "concentrated," I here mean that a greater quantity can be sold for a given price. Let us consider these cases in order.

(1) Let us here suppose as an extreme case that the demand exists only in a region about the center of the market sufficiently narrow for the basing-point system always to result in sales by the two identical producers over the whole of that region. In this situation our previous analysis shows that if the producers act "competitively" as to their base prices, they will in fact charge the ideal monopoly price. Moreover, the concentration at the center means that, for a given value of sales, the cost of freight absorption will be less than if the demand were more widely spread. This will contribute to making the basing-point system more profitable relative to f.o.b. mill selling than in the case already examined where demand is uniformly spread over the whole region. Hence we may conclude that concentration of demand at the center of the market will increase the protection which the basing-point system affords to identical competitors against their own predatory instincts.

(2) Let us now consider the opposite extreme situation where there is no demand for the product at all in a region, in the center of the market, sufficiently wide for the selling territories of the two producers to be immune from each other's invasion if they were selling on an f.o.b. mill basis. Assume the two competitors to be identical and to sell on an f.o.b. mill basis within their respective territories which are assumed to be identical as regards demand. They will then act as monopolists, and each will charge the ideal monopoly mill price within his territory and there will be no competition. If, however, the basing-point system is introduced, each producer may make sales in his rival's territory, provided his marginal costs and the cost of transport are sufficiently low. The problem is precisely the same as that which we investigated when we compared monopoly with the basing-point system for identical producers. Profits will certainly be reduced by the introduction of the basing-point system and prices may be higher or lower for the reasons we have already examined. In fact, it may be profitable for each producer to lower his base price sufficiently to drive his rival

out of his end of the market entirely. Obviously, the basing-point system in these conditions is not a practice that the industry itself would wish to continue; and we may conclude that not only the extreme situation we have examined, but also a relative concentration of demand at the ends of the market furnishes no inducement for identical competitors to adopt the system.

(3) We shall here consider the simple case where demand exists only at A and at B, and let us assume that the monopoly profits at A are greater than those at B. Now, provided the ideal monopoly prices in their respective markets are maintained, the difference in profits may make it profitable for B to absorb freight in order to sell in A's market, notwithstanding that A might retaliate in like manner. In other words, the multiple basing-point system will be profitable for B and unprofitable for A. A would have no retort to B other than to reduce his price until it was less than B's marginal cost plus freight from A to B; in which case he would drive B out of his market entirely. The very existence of the basing-point system in the case assumed implies that it is more profitable for A to accept B's policy than to resist it. This is the simplest asymmetrical demand situation; more complicated situations could be formulated and analyzed and it will be found in general that, if demand conditions differ sufficiently as between A and B, it will be profitable for one producer to adopt the basing-point system regardless of the reactions of his rival.

4. *Producers Not Situated at Equal Distances from the Ends of the Market.* Assume that CA is greater than DB, that is, A has a larger hinterland than B, and that demand is again uniform over the whole market and the marginal costs of A and B are constant and equal. Let us now consider the f.o.b. equilibrium situation. The fact that A's hinterland is longer than B's, while the demand curve at every point is the same, will make his ideal mill price in respect to that hinterland lower than B's, on the principles developed in the f.o.b. paper. In the competitive region AB on the other hand, their marginal net revenues in respect of their mill prices will be the same. In general, therefore, A's marginal net revenue will be less than B's, and f.o.b. equilibrium will be reached with A charging a lower mill price than B, provided they both make the same competitive assumptions as to each other's behavior. Further, any rational revision of these assumptions will probably result in a greater rather than a smaller disparity of prices. Now if A's mill price is less than B's, and their marginal costs are equal, it follows that ST will be greater than SU, so that, provided the mill prices remain the same, B can invade A's territory without fear of an equivalent amount of retaliation by A. Although, according to the principles we have already developed, A may tend to raise his

price, which may tend to reduce B's advantage, the initial difference in base prices will not be entirely obliterated and B's gain may persist if the forces making for a difference in mill prices under the f.o.b. system are sufficiently strong. Hence, in this case, it may be to B's advantage and it will be to A's disadvantage to substitute the basing-point system for the f.o.b. system.

Conclusion as to Asymmetrical Cases. Examples could be multiplied of asymmetrical situations where it is to the advantage of one producer or group of producers to adopt the basing-point system, while the remainder of the suppliers has no profitable alternative but to accept the system. Where the competitors are identical it would be a simple matter to negotiate an agreement for the profitable abolition of the system, but in the asymmetrical cases such an agreement would be a much more complicated matter. It seems to me therefore that in this section we have found far more convincing explanations of the existence of the system than in the first section. This conclusion is reinforced by the overhead costs argument and the unused capacity argument that are invariably raised as partial explanations of the system. These have genuine significance in the asymmetrical cases, but no necessary validity where the competitors are identical.[19]

A very pertinent point has been raised by one critic of this paper: namely, why, if I am correct in attaching importance to asymmetries, do we not find one group of producers supporting the basing-point system and another opposing it; whereas in fact producers are usually united in its support. Consider the case where A and B are unequal groups of identical producers. If B is the smaller group, as we have seen, it would prefer to substitute f.o.b. mill selling for the basing-point system, provided it could rely on the whole of group A remaining at A. But this is precisely what B cannot assume. If the basing-point system is abolished, some of the producers at A will be forced to move to B and the position of those originally at A will be worsened. Thus both A and B support the basing-point system, A because it is more profitable to invade B's territory by the basing-point method than to incur the capital costs of moving to B, and B because it is more profitable to submit to A's invasion than to have A locate plants at B. And this joint support need not imply collusion.[20]

III

We turn finally to consider the question of the non-base mill; that is, a mill which does not set a base price where it is located, but calcu-

[19] *Cf.* Cement Case, Respondent's Brief, p. 342.

[20] Let me reëmphasize that nothing I have said is intended to imply that it may not be a desirable objective of policy to force such a relocation of the industry.

lates its delivered prices at all points, including its own location, by reference to base prices set by other mills. This gives rise to the phenomenon of "phantom freight," which is included in the delivered price but not paid by the non-base mill. Professor Fetter testified in the Cement Case that the ability of the non-base mill to charge phantom freight "is, of course, exploiting its monopolistic power within that area."[21] It is hoped that this section will throw some light on the validity of that assertion.

We shall assume that initially there is a single monopolist located at a point A in Figure 2 in a linear market AD and that demand condi-

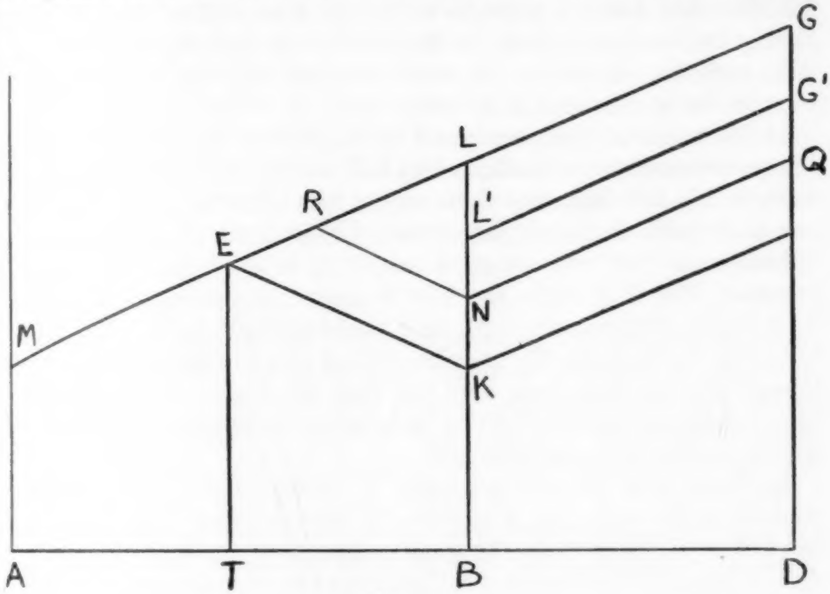


FIG. 2

tions are such that he maximizes his profits by selling on an f.o.b. mill basis. We shall consider merely sales along the line AD. The problem we shall consider is that of a new producer entering the industry at some fixed point B. We shall enquire whether it is profitable for him to operate as a non-base mill, that is, to accept A's delivered prices, or to establish himself as a new basing point. We shall assume that A's mill price will be unaffected by B's action. This assumption may be justified by assuming that A sells in directions other than AD, so that it is not worth while for him to modify significantly his policy in response to B's action.

In Figure 2, let AM be A's mill price and let MG represent his de-

[21] Commission's Brief, p. 74.

livered prices over the market AD. Let BK be B's constant marginal costs. Then KE, B's marginal costs plus freight, represents B's minimum delivered prices, so that he will make no sales to the left of T. (Of course BK may be sufficiently low for him to sell over the whole distance BA.) Then if B operates as a non-base mill, he will sell over the region TD at delivered prices as indicated by EG. We shall assume that he makes a given fraction of the sales at every point. If B establishes himself as a base mill, he will set a base price at B, say BN, and will sell on an f.o.b. mill basis over BD, and on an f.o.b.-mill-cum-freight-absorption basis over BT in the manner indicated by NR and RE. We shall assume, to begin with, that A's marginal costs are sufficiently low for him to meet B's delivered prices over the whole distance AD, and that B makes the same fraction of sales at every point, whether he is a base or a non-base mill.

If B's marginal costs are equal to BL, he has no alternative but to charge delivered prices indicated by LG, and he can make no profitable sales to his left. He may then regard himself either as a base or a non-base mill. It should be observed that he is here receiving no "phantom-freight" advantage or benefiting in any other way from A's presence. For if he were the sole occupant of the market, he would set a higher mill price than BL, and would sell both to his right and his left, and would make all the sales instead of a fraction of them. Even though B's marginal costs were less than BL, they may be sufficiently high for his optimum mill price to be greater than BL. Here again he would operate as a non-base mill.

In the cases in the last paragraph, B has been forced into a non-base position in the sense that if he were the sole occupant of the market, all his delivered prices would be greater than they are in the presence of A. We have now to inquire whether there are any circumstances under which B may seek shelter under A's "umbrella" rather than to be forced under it. First, suppose the optimum price for B at the point B is less than BL, and equal to BL′; then obviously B could increase his profits, as compared with his non-base position by establishing himself as a new basing point and setting a base price BL′. His optimum base price would, however, be less than BL′ since his object is to maximize profits over the whole region TD, and it would be profitable for him to charge a less-than-optimum price at B, in order to achieve optimum delivered prices in respect of all his sales. Secondly, suppose BL is equal to or less than B's optimum delivered price at B. From the point of view of sales to his right, it may nevertheless be profitable to B to charge a lower base price than BL in order to achieve optimum delivered prices over the whole region BD. From the point of view of sales to his left, however, the best approximation to an optimum

system of delivered prices B can achieve is that fixed by A, so that any attempt to establish himself as a new basing point with a base price less than BL will reduce his profits to his left. Now, if it is assumed that B is a finite distance from D, it will be possible for B to increase his profits to his right by more than he decreases them to his left by reducing his base price to some extent. But his optimum price will be greater than if he had only his sales to his right to consider.

Our conclusion[22] as to the non-base mill is therefore that its non-base position is at best a *pis aller*. B adopts such a position because he wants to charge higher delivered prices than those indicated by MG, but A's presence in the market prevents him from doing so. Once his marginal costs are sufficiently low he will establish a new basing point. The only situation in which A's schedule of delivered prices constitutes a protective "umbrella" for B is where there is competition between producers at B, and A saves them from themselves by coercing them into accepting his delivered prices. If, however, those producers were prepared to save themselves by acting as a single monopolist they would be hampered rather than assisted by A in working out their own salvation.

V

It has been shown in the foregoing sections that the basing-point system can be explained as a form of imperfect competition; and that given a suitable environment with respect to demand and cost conditions, the system may develop by each producer pursuing what he conceives to be his own self-interest. We have not proved that the system may not grow in any other way, but we have, I think, shown, conclusively, that if the producers concerned were prepared to negotiate an agreement they would certainly agree on something more rational and more profitable than the basing-point system. This of course does not mean to imply that agreements may not be made between producers in the basing-point industries; but the same may be said of any form of imperfect competition. The only type of agreement that the basing-point system is particularly likely to encourage is an agreement for its own abolition. It is of course true that equilibrium in imperfect competition implies to some extent a policy of live and let live; and we have seen that in some conditions this tendency may be stronger in the basing-point system than, say, under f.o.b. mill selling; but even this cannot be shown to be a general tendency. On the question of public policy as to whether the basing-point system should be abolished or retained, I can

[22] I regret that I found it necessary to be so prolix in the foregoing argument. Had there not been all this hypnotic talk of grisly phantoms lurking under umbrellas, I should have contented myself with pointing out that it is hardly likely that a restriction placed by A, acting in his own interest, upon B's action should benefit B.

only say that argument over the pricing methods involved will not answer the question in the absence of exhaustive empirical knowledge. On the one hand, the cross-haul is obviously non-economic but, on the other, consumers may benefit more, through lower costs, from the asymmetrical situations which the basing-point system permits than from the symmetry that a uniform f.o.b. mill rule would require. Which type of influence is predominant cannot be settled on *a priori* grounds.

If it were practicable or desirable to give the Federal Trade Commission powers unrestricted by legislative mandate, it could base its decisions on a consideration of all their economic implications. As it is, one can only hope that the lawmakers will eventually develop methods of defining standards of behavior in industries where imperfect competition is inevitable, and that meanwhile the Commission will use such discretion as is legally vested in it to consider on their merits such cases as do not fall unambiguously into the narrow categories of competition and monopoly now covered by the law.

Mathematical Appendix

In this Appendix the proofs of the main propositions of Section I as to the relation of basing-point prices to those under f.o.b. mill pricing and monopoly will be indicated. For the remaining sections of the paper I think the verbal argument is sufficient.

In Figure 1 let $AB = k$, $AS = d_1$, $SB = d_2$, $SU = h_1$, $ST = h_2$, $AM = p_1$, $BN = p_2$. Let the freight rate per unit of distance be unity and let the (constant) marginal costs for both competitors be zero. Let π_1 and π_2 denote the respective profits of A and B.

From Figure 1, and the argument of Section I, we can write for the profits of A

$$\pi_1 = \int_0^{d_1} p_1 f(p_1 + x)dx - \tfrac{1}{2}\int_{d_1-h_2}^{d_1} p_1 f(p_1 + x)dx + \tfrac{1}{2}\int_{d_1}^{d_1+h_1} [p_1 - 2(x - d_1)]f(p_1 + 2d_1 - x)dx \tag{1}$$

where f( ) denotes the demand function at every point of the market. The expression for π_2 will be symmetric with (1). From Figure 1, the following relations can be established:

$$d_1 = \frac{k - p_1 + p_2}{2} \tag{2}$$

$$h_1 = \frac{p_1}{2} \tag{3}$$

with symmetric expressions for d_2 and h_2.

It will be seen that the first term of (1) will denote profits of A under f.o.b. mill selling which we shall denote by $\pi_{1\ \text{f.o.b.}}$. Further, if $d_1 = \frac{k}{2}$, this term will represent the profits of a two-plant monopolist, π_{1m}, in respect of his plant situated at A.

We shall now examine the cases of quasi-coöperation and competition:

(a) *Quasi-coöperation.* Here A expects $p_1 = p_2 = p$ and consequently expects that $d_1 = \frac{k}{2}$ and it follows that $\pi_{1\ \text{f.o.b.}} = \pi_{1m}$.

Making these assumptions, the necessary condition for A maximizing his revenue will be obtained by differentiating (1) with respect to p. Thus

$$(4)\quad \frac{d\pi_1}{dp} = \int_0^{k/2} (pf'(p+x) + f(p+x))dx \; - \left[\int_{1/2}^{(k+p)/2} \left(x - \frac{k}{2}\right) f'(p+1-x)dx - \frac{p}{4} f\left(\frac{p}{2} + \frac{k}{2}\right)\right] = 0$$

That is

$$\frac{d\pi_1}{dp} = \frac{d\pi_{1m}}{dp} - \left[\int_{1/2}^{(k+p)/2} \left(x - \frac{k}{2}\right) f'(p+1-x)dx - \frac{p}{4} f\left(\frac{p}{2} + \frac{k}{2}\right)\right] = 0$$

Differentiating the equation for π_2 will also yield this equation for p.

The quantity enclosed in the square brackets will be positive or negative depending on the effects of an increase in p on the costs of cross-hauling, which have been described in Section I. Now we have assumed

$$\frac{d^2\pi_1}{dp^2},\ \frac{d^2\pi_{1m}}{dp^2} < 0$$

Hence the equilibrium price under the basing-point system will be greater or less than that under f.o.b. selling or monopoly depending on whether the quantity within the square brackets is negative or positive.

If, however, each competitor can sell over the whole market, we shall have $h_1 = h_2 = \frac{k}{2}$ and the second term in the square brackets in (4) will not occur. Thus, since f' is negative, this quantity will be negative and the basing-point equilibrium price will exceed the f.o.b. or monopoly price.

(b) *Competition.* Here A assumes p_1 and p_2 are independent. Differentiating (1) partially with respect to p_1, we have as a necessary condition for the maximization of π_1

$$
\begin{aligned}
(5)\qquad \frac{\partial \pi_1}{\partial p_1} &= \int_0^{d_1} (p_1 f'(p_1 + x) + f(p_1 + x))dx - \tfrac{1}{2}p_1 f(p_1 + d_1) \\
&\quad + \tfrac{1}{4}p_1 f(p_1 + d_1 - h_2) - \tfrac{1}{2}\int_{d_1 - h_2}^{d_1} f(p_1 + x)dx = 0
\end{aligned}
$$

When π_2 is differentiated partially with respect to p_2, an equation that is symmetric with (5) is obtained. The equilibrium prices of the two competitors will be given by the simultaneous solutions of these equations, where the second order conditions for maxima are also fulfilled. Considerations of symmetry then suggest that in equilibrium we shall have $p_1 = p_2 = p$, and consequently $d_1 = d_2 = \frac{k}{2}$. In these conditions we have for (5)

$$
(6)\qquad \frac{\partial \pi_1}{\partial p} = \frac{\partial \pi'_m}{\partial p} - \tfrac{1}{2}pf\left(p + \frac{k}{2}\right) + \left[\tfrac{1}{4}f\left(\frac{D+1}{2}\right) - \tfrac{1}{2}\int_{(k-p)/2}^{1/2} f(p+x)dx\right]
$$

or

$$
(7)\qquad \frac{\partial \pi_1}{\partial p} = \frac{\partial \pi_{1\,f.o.b.}}{\partial p} + \left[\tfrac{1}{4}f\left(\frac{D+1}{2}\right) - \tfrac{1}{2}\int_{(k-p)/2}^{1/2} f(p + x)dx\right]
$$

Now the quantity within the square brackets in (6) and (7) may be shown to be positive and therefore in view of our assumptions that

$$
\frac{\partial^2 \pi_1}{\partial p_1^2},\quad \frac{\partial^2 \pi_{1f.o.b.}}{\partial p_1^2} < 0
$$

over the range of our considerations, it follows that the equilibrium prices will be greater under the basic-point system than under f.o.b. mill pricing. In (6), however, the quantity within the square brackets may be greater or less than $\frac{1}{2}$ pf $(p + \frac{1}{2})$, whence it follows that the equilibrium prices under the basing-point system may be greater or less than those under two-plant monopoly, according to the conditions set forth in Section I.

If it is assumed that $h_1 = d_2$ and $h_2 = d_1$, we have instead of (6) for the equilibrium value of p_1

$$
\frac{\partial \pi_1}{\partial p_1} = \tfrac{1}{2}\,\frac{d\pi_{1m}}{dp_1} = 0
$$

so that the equilibrium prices under the basing-point system are identical with those under monopoly.

MONOPOLISTIC COMPETITION THEORY AND PUBLIC PRICE POLICY

By VERNON A. MUND

I

In monopolistic competition theory *duopoly* is usually defined as a case "where there are only two competing sellers" and *oligopoly* is treated as an extension of the case to "a few sellers."[1] A characteristic of these two situations is that there are "not so many [sellers] as to render negligible the contribution of each to the total supply." It is assumed as a condition in the problem that "there can be no actual, or tacit, agreement—that is all. Each is forced by the situation itself to take into account the policy of his rival in determining his own, and this cannot be construed as a 'tacit agreement' between the two."[2] A further assumption is that "if each seeks his maximum profit rationally and intelligently, he will realize that when there are only two or a few sellers his own move has a considerable effect upon his competitors, and that this makes it idle to suppose that they will accept without retaliation the losses he forces upon them." As a consequence, "No one will cut from the monopoly figure because he would force others to follow him, and thereby work his own undoing."[3]

In evaluating the assumptions underlying duopoly and oligopoly it should be observed that an essential feature of ordinary market competition is that traders have as complete a knowledge as possible of supplies, bids, offers, prices, etc. In the light of all the available information, traders are constantly readjusting their buying and selling valuations; each one is constantly forced to consider the action of his

EDITOR'S NOTE: The author is professor of economics at the University of Washington, Seattle.

[1] Edward Chamberlin, *The Theory of Monopolistic Competition* (1938), pp. 3, 8. The carefully prepared statement of monopolistic competition theory presented by Edward Chamberlin will be taken as typical of the usual treatment.

[2] *Ibid.*, pp. 30-31. It should be observed that "There *can be* no actual, or tacit, agreement," and "this *cannot be* construed" (italics mine), and similar expressions are not statements of fact but merely of the conditions assumed in the theory. These expressions may easily be misunderstood on a careless reading, as they seem to have been done by some making use of duopoly theory, to mean that the theoretic possibility that prices may be monopolistic without actual or tacit agreement between sellers is proof that there is and can be no agreement in such cases. Professor Chamberlin does not say that or anything approaching it, when read with due attention.

[3] *Ibid.*, pp. 48-49.

rivals, as well as his own reserve valuations at the going price. In this respect a typical competitive market does not differ from duopoly or oligopoly as pictured above. A significant difference, however, is that, although a competitive seller may take into account the action of a rival in determining his own action, in the final analysis he acts independently and makes a bid or offer in terms of his own judgment and estimate of the market forces and of his chance to make a profit or to avoid a loss. When an independent seller reduces his price, he may expect his rivals also to reduce theirs, if his estimate of market forces is correct. In initiating the lower price, however, a seller secures a temporary advantage in being able to make sales. The viewpoint of the independent producer is well expressed by the statement, "The best of us may be wrong, but of what use to be right if we cannot deal."

Oligopoly writers emphasize the fact that it is the fear of "retaliation" which restricts one in reducing his price when sellers are few.[4] The fear which restrains independents, however, is rarely the possibility that the dominant firm will reduce its prices uniformly. Rather it is the almost certain probability, not that the mill price will be reduced uniformly, but that delivered prices will be "cut" in particular local areas, or to particular customers, in a *discriminatory way*, expressly to injure the concern showing a price independence. Financially dominant concerns, operating in different trade areas, have the power to cut prices in one locality while maintaining them elsewhere, and it is the well-grounded fear of such a possible *discriminatory* "cut" in prices, rather than of a general reduction of the uniform price to all buyers, which is unquestionably the greatest deterrent to price reduction by independents.

There will be no dissent from the proposition that collusion is not only easier but also more tempting when the number of sellers is small. The real question is whether and how easily monopolistic prices can be arrived at and maintained without collusion and conference. The common testimony of business leaders who have endeavored to secure monopoly is the great difficulty of bringing and keeping rivals in line on price. This difficulty results largely from the different market positions of individual sellers. Some sellers are short of cash and cannot afford to accumulate inventory or to finance unused capacity; others are unwilling to speculate on the stocks which are likely to accumulate with higher prices. Further, every agreement implies some individual restraint, and as a rule sellers strongly resist giving up their independence of action.

The task of securing monopoly is, of course, much simplified when the interests to harmonize are few. When there are only two sellers, a

[4] See, for example, *ibid.*, pp. 48-49.

leader has only one price to worry about and only one other seller to convince; when there are three sellers, only two individuals have to be brought into line. It has long been a maxim in the public interest that every trade not given to public regulation should be in numerous hands, for when it is in few hands there invariably are rings, corners and combinations.

When rival sellers account for only a small percentage of the business, they may follow a large seller because of fear or because of the extra profits which a holding of the "umbrella" (price) by the dominant producer or producers enables them to secure. In general, an inconsequential seller cannot expect to secure a price higher than that quoted by the large seller in exactly the same market and from the same group of buyers, for the large seller is likely to be in a position to absorb more business at the going price. Similarly, the small seller cannot expect to change the going price, for he does not have the productive facilities to take business away from the larger rival. The studies of a long-time student of the copper industry indicate, for example, that the sales of secondary refined copper which account for 7 to 7½ per cent of the total output of domestic refineries have little, if any, effect on the market price of copper.[5] If a large seller is temporarily "sold up," or if the small seller cannot move his stocks, the small seller may sell at a price in the one case above, or in the other case below, the umbrella. This action, however, will not affect prices on the great bulk of transactions, for only a few customers can be satisfied.

When rival sellers are relatively small and inconsequential, it may be said that a dominating seller (or several acting as one) who controls such a large part of the supply that others are unable to threaten his position has a considerable degree of monopoly power. Usually in such cases, it is the dominant producer who assumes the burden of curtailing production, or of accumulating inventory, in order to secure a monopoly price. A necessary condition of a competitive market is the presence of sellers and buyers acting independently, with no one person so dominant as to be able to threaten or ignore the price independence of another. This situation may exist with only two (or a few) sellers and, in principle, is not dependent upon a large number of sellers.

When rival sellers are consequential, though few in number, they may choose to keep their independence, and produce and sell freely to secure a legitimate manufacturing profit. This state of mind may result from an inability to finance inventory accumulations or unused capacity, or from a desire to keep free from restraints and control by others.

[5] Percy Barbour, *Secondary Copper* (Mining and Metallurgical Society of America, 1931), pp. 75-81.

It is the production of independent sellers of significant size, having such an attitude, which often operates to bring monopoly schemes to grief.

When sellers are few in number, however, the frequently found desire to form rings and combinations is most easily effected. The power which brings, and holds, a few rivals together is simply the cohesive power of private plunder. It is difficult for self-interest to resist an opportunity presented by a ring leader to make extra profits.

How do a few sellers proceed when they decide to act as one? In the first place, in order that several sellers may act as one on price, some price formula must usually be devised to adjust the varying freight costs of scattered sellers to given destinations. It is obviously for this reason that basing-point and freight-allowed formulas come into being. The original establishment of such devices always requires discussion, understandings, and agreements among the coöperating sellers, but a subsequent generation of executives may inherit a pricing formula and regard it as a "custom." The experience often is, however, that deviations bring rebuke and admonition from other sellers, and that thereupon the old agreement becomes reappraised and renewed.

In the second place, regular price following requires that sellers forego their own individual price and production estimates and that they unite mutually upon a compromise position. Thus, the *Wall Street Journal* for November 29, 1930, in explaining the action of the large producers in raising the price of copper from 9½ cents to 12 cents stated: "There were differences of opinion among producers as to the wisdom of such a rapid advance. After argument those wanting a more orderly market acquiesced in advancing the foreign price and that automatically raised the domestic price."

It is easy to overestimate the rationality of a business man's psychology. Without an understanding on price, a seller cannot be sure of what another will do. Assuming strict rational behavior, identical output and trade interests, a demand that is highly inelastic, and few sellers with entry of others improbable, it is conceivable that each seller might hesitate to reduce his price for fear that his rivals would follow suit. Such assumptions, however, are highly unrealistic. Business men are typically individualistic, self-seeking, and distrustful of one another. Their judgments and market positions are different and their foresight is not perfect. With the existence of unused capacity or unsold stocks, moreover, the impulse to shade prices to stimulate sales is very strong, and the urgency for business varies sharply with different sellers. When one examines the restrictive sales policies, pricing formulas, Webb-Pomerene export associations, and other mutual devices which exist in industries where there is "unity of action on price,"

one realizes that market leaders do not usually rely upon rationality for their exercise of monopoly power.

In an industry such as a natural resource industry where entry is definitely restricted because of exclusive ownership of mineral deposits, and when sellers are few (say two), well financed and with similar interests, and when demand is highly inelastic, it is possible that the two sellers may pursue a common price policy without formal meeting and agreement. In such a case, the larger producer announces a price which the small producer in turn faithfully follows—so long as it appears to be in his interest. Since a producer cannot sell freely all of his regular output at a "pegged" price, a price following normally requires curtailment of production or inventory accumulation, and at times export dumping. A price leader and a follower must be prepared to pay this price for monopoly profits, and if the monopoly good is a by-product for one seller, a policy of high prices and limited sales may be quite expensive.

The mere matching of prices by a follower is not an expression of price competition, and preëminently not when the matching follows a mathematical formula resulting in varying mill-nets. Under competition each seller seeks to judge the market independently and helps in varying degrees to create the supply and to make the current price. In following a formula price, however, a seller tacitly concurs with it, regardless of his own sales, unused capacity, and inventory accumulation. As a result of such price following there is "unity of action on price," and the two sellers by their concerted action represent monopoly.

Although active competition may exist when sellers or buyers are few, it is, of course, more likely to occur when sellers are numerous. There is then a greater probability of securing in a market a number of alert, capable sellers who will not allow a competitor to sell greatly over an equilibrium price. Similarly, when there are numerous buyers, there is a greater chance of securing active bidding with no buyer being permitted to buy too cheaply. A large number of traders brings a greater diversity of interests and a wider range of judgments on the worth of the product, and these are factors which help to develop the potential value of the product in its various uses.

II

Let us now return to the question whether, when sellers are few, concerted action can occur without explicit or implicit collusion, agreement, or understanding. Chamberlin insists that agreement, actual or tacit, is not necessary.[6] The same view is taken by de Chazeau in his analysis of steel prices. He says: "Under conditions of oligopoly,

[6] Chamberlin, *op. cit.*, p. 31.

effective price leadership within or between basing-points need depend neither on tacit understandings nor on collusive agreement"; and again, "agreement is not a necessary condition of uniform pricing under oligopoly."[7] Although these authors apparently would admit that unity of action may be accompanied by agreement, tacit or actual, when sellers are few, their main contention is that collusion is not a *necessary* factor in uniform pricing.

The significance of such a thesis, of course, depends upon whether it means that collusion is always or only occasionally absent. Identical prices might occur without collusion so infrequently as to be without significance, while in actual, concrete situations collusion may be the usual condition for identity of price.

The persons applying duopoly theory, however, put the whole emphasis upon the distinctive doctrine of the purely automatic and uncollusive character of the greater part of monopolistic behavior. We are asked to believe that, generally speaking, monopolists first arrive at a meeting of minds without a single guilty word or gesture suggesting formal agreement; that no one formally or by innuendo tries by promises of rewards or threats of punishment to induce reluctant independents to join the group and to follow orders; and that there are no equally unmistakable threats and acts of discriminatory competition, causing loss and even ruin, to deter present and potential competitiors from enterprise and investment when prices and profits have been raised above normal rewards by the artificial restriction of supply. The net effect is to picture monopoly as so innocent and inevitable that it defies all human intervention, legal regulation, and moral condemnation. These ideas have been eagerly appropriated and employed of late before public tribunals by the apologists of monopoly as the allegedly "scientific" justification of current collusive practices in contemporary American business.[8]

[7] Carroll R. Daugherty, Melvin G. de Chazeau, and Samuel S. Stratton, *The Economics of the Iron and Steel Industry*, Vol. II, pp. 618, 631.

[8] In the testimony presented by counsel for the cement industry during the recent hearings of the Federal Trade Commission on its proceeding against the industry for use of the basing-point plan of delivered prices, the basing-point plan was characterized by economists from our leading universities as being a "description of competition" (pp. 45505, 44738); "without inference of collusion or conspiracy" (pp. 42975, 44619, 45485, 45822); "a competitive method of pricing" (p. 44646); "definitely favorable to the public interest" (p. 44811); "consistent with competition" (pp. 45485, 45842, 44246, 44619, 44106, 42982); a formula which springs "spontaneously out of the conditions of the industry" (pp. 45830, 42986). Record of Proceedings of the Federal Trade Commission against the Cement Institute, *et al.*, Docket 3167 (1940), at the pages cited in parentheses.

Other examples of the attempt to exploit the doctrine that monopolistic behavior is automatic and uncollusive in character are to be found in the United States Steel Corporation T.N.E.C. Papers, *The Basing Point Method* (1940), Vol. III, pp. 28 *ff.*; and in Daugherty, de Chazeau, and Stratton, *op. cit.*, Vol. II, pp. 618, 631, 728.

In actual market situations, it is possible that the independent rivalry of a few sellers may cease *momentarily* while each seller seeks to estimate market forces in terms of his current output and capacity. However, market forces are *fluid* and constantly changing and *someone* must judge the market in quoting a price. If this price is regularly and systematically followed by another seller or sellers, there is a concurrence (agreement) on price which may be either implied (tacit) or actually discussed. In many industries today "identical delivered prices" under the basing-point or the freight-allowed method of price quotation regularly follow a formula. This necessarily implies agreement, either voluntary or involuntary, induced through fear or favor; for, otherwise, each seller could not be expected to quote delivered prices identical with other sellers anywhere at all times.

Systematic price following by sellers of consequence involves mutual restraints on individual action which the sellers feel obliged to respect, as well as a harmonizing of individual views on the best market policy. The arrangements (restraints) which producers usually make include sales to consumers alone, sales at delivered prices only, prohibitions on resale, limited forward deliveries, output curtailment, etc. The formulation of, and systematic adherence to, these arbitrary policies necessarily involves discussion and understandings. Price understandings, tacit or discussed, are most clearly in evidence when sellers of consequence follow along, week in and week out, regardless of variations in their individual sales, inventory, or degree of utilized capacity.

In the light of the behavior patterns of individual sellers acting independently on price, it appears that the thesis that a policy of identical prices according to formula can be followed without collusion, agreement, or understanding is misconceived and unproved. Regular and systematic price identity of this sort over a period of time can exist only as the result of monopolistic agreement or of monopolistic coercion, actual or implied. It is doubtful whether actual cases of so-called duopoly or oligopoly can be found in which at one time or another there has not been some conscious collusion, coercion, or formal agreement.

III

The definition of *pure competition* typically given in monopolistic competition theory is "competition unalloyed with monopoly elements";[9] and the first condition essential for this concept is said to be the presence of a large number of buyers and sellers. "There must be a large number of buyers and sellers so that the influence of any one

[9] Chamberlin, *op. cit.*, p. 6.

or of several in combination is negligible. There is no need that their numbers be infinite . . . but they must be large enough so that, even though any single individual has, in fact, a slight influence upon the price, he does not exercise it because it is not worth his while."[10]

This concept is at once helpful and misleading. Competition is difficult to maintain when sellers are few. But all three of the terms, "influence upon the price," "negligible," and "exercise," are ambiguous. Their meaning varies as they are applied to competitive or to monopolistic situations. In the theory of competitive prices, the influence of each seller in the determination of the equilibrium price might be said to be "negligible" merely in the sense that his *purpose* is not to change this price, but is either to profit by selling at the going price or to escape a loss by declining further to sell and perhaps by shifting to a more advantageous position. However, the influence of no single seller on price is "negligible" in the sense that his action in no degree tends to modify or to maintain the going price, for every going price is the resultant of the choices made by all the exchangers in the market. This influence is not confined to the persons who at the moment are "marginal" as contrasted with "intra-marginal." The presence of all is necessary to account for the actual equilibrium.

The influence of a single market seller on price may be very considerable in many actual situations. Some units of supply offered by a seller at the fluctuating margin of price not only are the most sensitive to price changes, but also are at a certain moment the most influential in initiating price changes. A change in the equilibrium price results from a preponderance of demand or supply at the going price. In the mechanics of this change, some buyer or buyers having higher latent valuations raise their bids, or some seller or sellers having lower latent valuations lower their offers in order to be able to deal, and this action taken in the altered market situation brings about a new equilibrium price. Competitive sellers, however, do not exercise this sort of influence upon price intentionally and as they please; they exercise it automatically, unintentionally, and unavoidably with every independent decision they make to sell or not to sell in a certain market at the going price, for this decision in some degree tends either to maintain price or to alter the whole market situation in which a new equilibrium price is made necessary.

When it is said in the first assumed condition of pure competition that "even though any single individual has, in fact, a slight influence upon the price," the reference evidently is to that influence which is unconsciously and inevitably exercised by competitive sellers, in every choice they make to sell or not to sell at the going price. But the con-

[10] *Ibid.*, p. 7.

cluding clause, "he does not exercise it because it is not worth his while," implies a potential influence which is not inevitably exercised, and is not exercised at all except when it is profitable to restrict supply deliberately. The thought is confused between the unintentional influence of sellers upon price in a competitive market, and the purposeful limitation of supply by a monopolistic seller (or group of sellers) in order to raise prices and thus to maximize profits from the sale of the remainder.

IV

Another condition necessary to pure competition greatly emphasized in monopolistic competition theory is that "goods must be perfectly homogeneous, or standardized, for if the product of any one seller is slightly different from those of others, he has a degree of control over the price of his own variety."[11] In pursuing this thought, it is pointed out that in pure competition the sellers, too, must be "standardized." "Anything which makes buyers prefer one seller to another, be it personality, reputation, convenient location, or the tone of his shop, differentiates the thing purchased to that degree."[12]

This limitation of *pure competition* to cases where the goods are "perfectly homogeneous" is so stringent that almost all prices become in some degree monopolistic by mere definition, no matter how independently and eagerly the several owners are acting in selling the goods at the best prices they can get. Such a requirement excludes from the possibility of "pure" competition most, if not all, natural products, such as grains, fibers, minerals, and animals, as well as many semi-processed goods, such as hides, tallow, cheese, molasses, etc. There is always great variation in nature. It is said, for example, that no two sugar plantations will produce blackstrap molasses which is exactly the same in quality. In the South cotton classifiers recognize over twelve hundred different qualities of cotton. Only goods identical in pattern and quality, highly processed in terms of a common formula, meet the requirement of "perfect homogeneity,"[13] and no generally useful public policy of competition could ever be formulated in terms of such goods alone.

The requirement of similarity in goods requisite for a practical system of competitive pricing is met if the goods of the different sellers are usable in meeting the needs of a substantial group of buyers in a given market. In view of the variations in qualities of goods, it is

[11] *Loc. cit.*

[12] *Ibid.*, p. 8.

[13] An excellent analysis of this point is made by John Ise in the special problem of urban and agricultural rents, in "Monopoly Elements in Rent," *Am. Econ. Rev.*, Vol. XXX (March, 1940), pp. 44-45.

hardly conceivable that all units of a distinctive class of goods will be chosen with indifference by all buyers. Some buyers, for example, need cotton of a specific grade and staple, but there are others who can use the different grades interchangeably. As a result of this diversity of interest which usually exists in a market, quality differences find expression in price differentials.

The other aspect of homogeneity, that the sellers themselves must be "standardized," is also a hypothetic requirement. In view of the great variation in human personalities, it is almost certain that personality factors may become some basis for choice, either positive or negative. To recognize personal factors in business transactions, however, is not to deny the primary importance of the price nexus. The problem is well expressed by the old maxim, "There are no friends in the grain business for a quarter of a cent." The selection of a seller also can hardly be called a random matter, for under competitive conditions buyers are constantly shopping about in search of the lowest price. It is true that in an increasing number of cases there is no lowest price, for frequently monopoly is expressed in terms of identical prices and sellers are typically selected by drawings, the flip of a coin, and by the rapidly growing practice of reciprocity by which orders are granted to those concerns that reciprocate with an order.

V

Another concept in monopolistic competition theory is *perfect competition*. Perfect competition is defined as pure competition, plus "an absence of friction in the sense of an ideal fluidity or mobility of factors such that adjustments to changing conditions which actually involve time are accomplished instantaneously in theory. It may imply perfect knowledge of the future and the consequent absence of uncertainty. It may involve such further 'perfection' as the particular theorist finds convenient and useful to his problem."[14]

The basic phrases in the definition of perfect competition, such as "ideal fluidity," "perfect knowledge," etc., are not characteristics of the market place; nor are they characteristics of the actual making, converting, and processing of goods. Rather they are statements of conditions which may be assumed by a given theorist. From the days of Josiah Tucker and Adam Smith, those concerned with making competition more effective have spoken simply of "rivalry," "rivalship," "competition," "free competition," "competition without restraint," and "effective competition." Alfred Marshall cautioned his readers that "it may be well to insist again that we do not assume that competition is perfect."[15] The concepts of "pure" and "perfect" competi-

[14] Chamberlin, *op. cit.*, p. 6.

[15] Alfred Marshall, *Principles of Economics*, 8th ed., p. 540.

tion appear to have been devised by certain mathematical economists in building the distinctive doctrines of monopolistic competition. Although such concepts may be useful in theoretical discussion, their assumptions are greatly out of accord with the realities in economic processes; and serious error must necessarily result when they are used in formulating and appraising public price policy.

VI

In monopolistic competition theory, ***monopoly*** is defined as "control over supply."[16] It is sometimes stated, although sometimes only implied, that monopoly means a control over supply exercised by one seller. In accounting for monopoly, attention is centered primarily on the differentiation which may characterize a seller or a good. According to Chamberlin "with differentiation appears monopoly, and as it proceeds further, the element of monopoly becomes greater. Where there is any degree of differentiation whatever, each seller has an absolute monopoly of his own product, but is subject to the competition of more or less imperfect substitutes."[17]

In defining monopoly as control over supply, and in considering supply to be an amount, or source, of goods differentiated from others, the monopolistic competition theorists have confused the problem of monopoly with that of scarcity.[18] In a literal sense, it would be right to state that there can be monopoly in which the scarcity is natural, if the scarcity is under a single control. A single ownership of a differentiated good or multiple units thereof, however, does not mean that the seller will thereby be able to secure a monopoly profit. The control must extend to such a large part of the multiple units of a species of market goods that the seller can manage price and make more by selling fewer units. In an economic sense, monopoly arises only when the single control makes possible an artificial enhancement of scarcity. The essence of monopoly is the power to manage price to make more profit by selling less. The distinguishing feature of monopoly is not scarcity, as such, but rather an artificial scarcity which is a concomitant of price control. It is the manifold ways and means of artificially enhancing natural scarcity that constitutes the monopoly problem to be solved by social control.

According to monopolistic competition theory, each seller with a store site of different quality or location has a monopoly. But it is hardly ever true that any two store sites are of equal value; they usually

[16] Chamberlin, *op. cit.*, pp. 7, 65.

[17] *Ibid.*, p. 9.

[18] This confusion is found in the work of John Stuart Mill. Mill states: "A thing which is limited in quantity, even though its possessors do not act in concert, is still a monopolized article." ***Principles of Political Economy*** (Ashley ed., 1848), p. 448.

grade off in quality in a variety of ways. The fact, for example, that your plot of land is of a different quality from mine does not mean that either one of us has a monopoly. The problem is simply one of the value of different grades of scarce land.[19] As long as there is no concerted action among the various owners to withhold land and leave it vacant, there is no monopoly.

In the sale of goods covered by patents, copyrights, and trade-marks, price management and supply restriction typically prevail. Such goods are usually produced in no greater amounts than can be sold at a previously named price, so the fact of a curtailment in supply may not always be apparent. The frequent breaking down of price maintenance schedules by retail dealers, however, in an effort to secure larger sales, bears witness to the curtailment involved. A comprehensive system of compulsory grading, along with improved consumer education, would do much to force sellers of branded merchandise to give way in their policy of high prices and limited output.[20] With compulsory grading, moreover, sellers are not able to divert at lower prices excess supplies which cannot be sold at the managed price.

When prices are managed and fixed at a given level, an increasing demand at the fixed price often results in capacity production, and at times in a taxing of facilities to their utmost, with a postponement of deliveries and a rationing of supplies. Such a situation is really a case of "inverse" monopoly; for, with competition, the price would rise to equate demand with supply. Under monopoly conditions, however, such factors as the difficulty in deciding upon a new price, or a more far-sighted policy of forestalling the entry of new producers, sometimes causes sellers to keep rigidly to a given price lower than could be obtained competitively. It is when demand decreases and the managed price is maintained that the characteristic of artificial scarcity reveals itself.

The definition of monopoly in monopolistic competition theory not only involves a confusion of the concept with that of scarcity, but also a failure to emphasize the prevalent fact that several, or many, sellers may act as one. From an economic standpoint the presence of monopoly is to be found not in the number of persons controlling the supply, but rather in the market situation which faces buyers. If the market supply is in large measure "controlled" either by one seller or by a group which acts more or less as one on price, there is present an element of monopoly. The essence of monopoly is the power to effect an artificial

[19] See also Ise, *Am. Econ. Rev.*, Vol. XXX, pp. 44-45.

[20] In Canada the grading and labeling of canned goods has resulted in bringing prices in line with quality, and the same result is taking place in the United States.

enhancement of scarcity, a particular scarcity which in all but the rarest cases is produced by collective action involving some sort of agreement. Monopoly is typically the result of a meeting of the minds of sellers on price and has to do with human contracts and agreements, rather than with scarcity from impersonal causes.

Thus, the definition of monoply proposed by the monopolistic competition theorists not only involves illogical assumptions, but also is out of accord with established usage. The concept appears, therefore, to be one which is inappropriate to use in formulating a workable policy of price regulation.

VII

Thus far we have been examining the concepts of monopolistic competition in terms of concrete economic processes, as well as in terms of the thought on monopoly which has gone before. The principal significance of monopolistic competition theory arises from current applications of the technique of the theory to particular sets of facts, and to an appraisal and formulation of public price policy.

Although it is recognized in monopolistic competition theory that "perfect" competition is unreal and impossible of attainment, persons trying to apply the technique of the theory charge that this is the goal expected and sought by those concerned with making competition more effective in our present economic order. Thus Mr. de Chazeau states that perfect competition is impossible and then charges defenders of antitrust law policy with foolishly trying to bring it about. In analyzing the work of Professor Fetter on the basing-point system, de Chazeau says: "The conviction is that competition will effect prices more nearly in accordance with mill costs and that under *perfect competition* the mill-net price for steel of a given kind would be identical irrespective of the location of buyers. But the truth of the underlying assumption—that *perfect competition* is practicable in the steel industry—is not questioned."[21]

Similarly, in the recent study of the iron and steel industry financed by the United States Steel Corporation and supervised by Theodore O. Yntema, it is stated, "The criticisms of the basing point practice in the steel industry *all* stem from the proposition that it results in deviations from 'perfect competition,' and the proposed alternative, the

[21] Daugherty, de Chazeau, and Stratton, *op. cit.*, Vol. I, p. 552. Other examples of this same misrepresentation are found on pp. 550, 551, 572, 1105. Italics mine.

The concept of "perfect competition" used by de Chazeau appears to be the same as that presented by Chamberlin. According to de Chazeau, "'perfect' competition is seen to be highly abstract, requiring the absence of all elements of friction, immobility, and any undiscounted future changes." *Ibid.*, Vol. I, p. 549.

uniform f.o.b. mill price system, is put forward as a supposed means of realizing 'perfect competition.' "[22]

A further example of this misuse of economic concepts may be found in the economic testimony presented by counsel for the Cement Institute, *et al.*, during the recent hearings of the Federal Trade Commission on its complaint against the use of the basing-point plan in the cement industry. In replying to the complaint, the counsel for the cement industry developed through the testimony of economists secured from leading universities the thesis that the concept of competition of "the Classical economists," the "older economists," and the "critics of the basing-point plan" is a "preconceived," "impossible," "unreal" type of competition which present-day economists would call "perfect competition."[23]

It appears that the persons applying the concepts of monopolistic competition theory are here reading their special concepts on competition into the views of those who are interested in making competition more effective. They apparently fail to realize that monopolistic competition theory is based on changed definitions which are substantially different from those long held by economists. In terms of their changed definitions, the monopolistic competition theorists find an enormous increase in monopoly.[24] It was with the tools of monopolistic competition theory that Mr. de Chazeau analyzed the iron and steel industry and reached his principal conclusion that the industry was one of oligopoly in which price competition could not be expected.[25] If those persons trying to use the technique of monopolistic competition theory had approached their studies with realistic or workable concepts of

[22] United States Steel Corporation T.N.E.C. Papers, *The Basing Point Method* (1940), Vol. III, pp. 21-22. Italics mine. For additional statements that "perfect competition" is the desired norm of those seeking to restore competition, see pp. 35, 73, 80, and 84.

According to the United States Steel Corporation's study, perfect competition requires "(1) that the commodity dealt in be strictly uniform; (2) that there be so many sellers independently offering the commodity for sale, and so many buyers independently bidding for the commodity, that no one seller or buyer could influence the price level in the market; (3) that sellers and buyers would know all or at least many of the bids and offers; (4) that all sellers and buyers would be free to enter or retire from the market; and (5) that as a consequence of the preceding conditions, price would be the only possible inducement for any buyer or seller to consummate a sale." *Ibid.*, p. 21. This definition of "perfect" competition appears to be similar to Chamberlin's concept of "pure" competition. See above, p. 1.

[23] Record of Proceedings of the Federal Trade Commission against the Cement Institute, *et al.*, Docket 3167 (1940), especially pp. 42948, 42949, 43297, and 45474.

[24] Thomas J. Anderson, Jr., in a note on "The Rise of Monopoly," *Am. Econ. Rev.*, Vol. XXX (March, 1940), p. 120, significantly observes that "imperfect or monopolistic competition theorists of today would discover much less monopoly in the modern economy than they do if they followed the less refined usage of the terms 'commodity' and 'market' adhered to by the economists of the Classical school."

[25] Daugherty, de Chazeau, and Stratton, *op. cit.*, Vol. I, pp. 557-558; and Vol. II, p. 1118.

competition and monopoly, their conclusions most likely would have been strikingly different.

In applying the concepts of monopolistic competition to antitrust law policy, the foregoing persons also read the view of perfect competition into the type of competition which is required by the antitrust laws. Since these persons find that even pure competition exists almost nowhere, they see and consider efforts to enforce our antitrust laws in the industries studied "doomed to futility."[26] Such an incorrect, defeatist view, widely and popularly publicized,[27] is being designedly used in the defense of monopolistic practices and apparently to prepare the way for a further weakening or a complete cessation of antitrust law enforcement.

VIII

In working toward a concept of "workable competition" in public policy, it may be observed that competitive activities of business men express themselves in many ways, including rivalry in price, quality, sales activity, advertising, "free" services, gifts, etc. History indicates that, for purposes of public policy, to insure that the fruits of technical progress shall inure to the public in the form of more and better goods at lower prices, the most essential type of competition is *price competition.* With this assured, quality and service competition naturally follow and find expression in price differentials.

When there is no legal restraint on a seller's activity in offering goods of a given category, and no private agreement or coercion, actual or implied, among the sellers, there is possible the kind of "workable" competition (never "perfect") called for by the antitrust laws. All experience shows, however, that these basic conditions necessary for a workable price competition never can be maintained without a continuing governmental policing of price practices to insure that they are open, fair, and free from discrimination.

In a very broad sense competition of some sort is universal and everywhere. Every seller in a degree is competing with every other seller of goods and services for the buyer's money. The universal substitution of goods that is constantly going on occurs at the margin of choice and is governed by relative prices and marginal valuations. The competition afforded by substitutes, however, would perhaps be better described as *substitute competition;* the phrase monopolistic competition is a contradiction in terms. The fact that a given product touches in some directions the competition of a substitute does not mean that there is

[26] See, for instance, *ibid.*, Vol. I, p. 548; and Vol. II, p. 1146.

[27] For example, the publication *Steel—Problems of a Great Industry*, Public Affairs Pamph., No. 15, 1937, pp. 8-14.

no monopoly within that industry, and that government may forego an enforcement of the antitrust laws.

The concept of monopoly which is the basis for social policy is a unity of action among sellers as to price, this unity adding a measure of artificial scarcity to whatever scarcity derives from other sources. Monopoly in this sense involves the absence of independent price competition. It exists when a single seller of a distinctive category of goods, or a sufficient number of sellers acting as one on price, is able to establish or make the going price, or prices, that as an actual fact will be largely observed in the industry. When there is no rivalry *on price*, there is monopoly in defiance of the law even though a dozen salesmen are wastefully "competing" in the field for orders.[28] A buying monopoly, on the other hand, exists when a buyer, or a group acting as one, has the power to lower the market price and yet hold sufficient sellers so that a net profit is made by the lowering of price. The various methods of securing monopoly are manifold and vary from industry to industry, as well as over periods of time.

Monopoly prices may be uniform mill-net prices, but usually they are discriminatory because price discrimination nearly always makes possible a larger revenue. It is a generally accepted principle, clearly conceived first in the theory of "dumping" in foreign commerce, that *systematic* price discrimination can occur only with monopoly.[29] Systematic discriminatory pricing is not the kind of price competition found in a true market, but is rather a formula method of quoting prices which enables sellers to act as one.

The competitive impulse in sellers is hard to restrain and a scheme of artificial pricing very often simply forces competition underground. Just as the American experiment of prohibition resulted in bootlegging, so likewise the modern business practice of collusive price agreements has forced rivalry on price, so far as it still survives, to take the form of secret discrimination in favor of certain buyers.

IX

In summary, it may be said that any careful examination of recent monopolistic competition, duopoly, and oligopoly theories reveals how

[28] The much emphasized "quality" and "service" competition rendered by sellers acting as one on price cannot be identified with *price* competition as many economists have done. See Federal Trade Commission, *op. cit.*, pp. 42958, 42998, 44393, 44733, 44738, 45494, 45650, and 46128. Free postcards, air, water and other services do not enable motorists to buy more gasoline. It is with price competition that the fruits of technological progress inure to the public in the form of more and better goods at lower prices.

[29] For a discussion of the principle that "there can be no discrimination without some monopoly," see A. T. Hadley, *Transportation,* pp. 101, 108; Frank Taussig, *Some Aspects of the Tariff Question*, p. 208; Jacob Viner, *Dumping*, pp. 1-3, 94-95; Frank A. Fetter, *Masquerade of Monopoly,* pp. 300, 411, 417; and Vernon A. Mund, "Prices under Competition and Monopoly," *Quart. Jour. of Econ.,* Vol. XLIX (1934), pp. 288-303.

greatly the assumptions are out of accord with the realities in economic processes, and how essentially the definition of the terms differs from that hitherto understood in the discussion of antitrust law policy. Therefore, most serious error results when this disparity is overlooked. The terms serve rather to confuse than to clarify thought regarding the competition required by the antitrust laws.

The purpose of the present essay is not to condemn the abstract theory of monopolistic competition, as such; it is rather to oppose the unjustifiable use which has been made of it. In the problem at hand, there is a need for clearly distinguishing between an abstract theory which may have a certain validity under conceivable conditions, and, on the other hand, the application of a theory assuming such a highly improbable or rarely occurring set of conditions in the formulation and appraisement of a workable policy of price regulation.

It may be alleged by some that no formal pattern of theory can be directly applied to aid in answering questions of public policy. In holding such a view, however, one is denying the maxim that the experience of the past is worth remembering. Whether one reads Zeno's Code, the writings of Jean Bodin and Adam Smith, or studies the actual way in which modern mergers, pricing formulas, holding companies, and restrictive sales policies originated and developed, one finds that monopoly arises out of human action and human volition, rather than from technological, impersonal forces.

The exchange of goods is a phase of human conduct and requires rules as do other forms of conduct. In applying the theory of competition to the fields of manufacturing and merchandising one simply calls for competition of a non-discriminatory type, open and aboveboard. The disappearance of this type of conduct was a result of human volition and its restoration awaits the public will. It is irrelevant that the result would not correspond to any picture of "perfect competition."

PRICE CONTROL IN OUTLINE[1]

By DON D. HUMPHREY

When Germany invaded Poland, the gross national product of the United States was running at an annual rate of 86 billion dollars, and most manufacturing industries were operating at less than 75 per cent of capacity. Industrial production and wholesale prices stood at 107 and 93, respectively, on a 1935-39 base. Three years later, in August 1942, gross national product was 167 billion dollars (annual rate), industrial production was up 74 per cent, and all wholesale prices except farm products and foods had risen 19 per cent. Farm prices, on the other hand, had risen 85 per cent, while an important fraction of the 18 per cent increase in agricultural production must be credited to favorable weather.

Except for imports and strategic war materials, the impact of the war at the outset was largely speculative. Spot prices of 28 basic commodities and of critical materials jumped 25 per cent in September 1939. But the cost of living was almost unchanged at the year's end, and nine months after the attack on Poland the entire price structure had softened and production was drifting back toward pre-war levels.

Following the swift conquest of France and the expulsion of the British army from the continent, this country launched a 12-billion-dollar defense program. The Advisory Commission appointed to direct the program included a Division of Price Stabilization. In the field of direct price control, the job was mainly to restrict speculation. The conference (or "jaw bone") method of price control was successful in the case of copper, steel, and many other metals but was less successful in the case of lumber.

From the middle of 1940 until the spring of 1941, total industrial production increased 25 per cent while durable goods production increased 43 per cent. Wholesale prices rose only 3 per cent. The spring of 1941 marked a turning point on the price front. Congress provided

EDITOR'S NOTE: The views expressed are not necessarily those of the Office of Price Administration but are the personal views of the author who is chief of the Price Analysis and Review Branch, Research Division, O.P.A.

[1] Space limitations have not permitted the inclusion of several statistical tables and charts that should accompany these remarks. Some of these are available in the Price Control Reports of the O.P.A. The First and Second Quarterly Reports to the Congress also contain a more complete account of the development of price control.

support prices for basic agricultural products, the Lease-Lend act was signed, and defense spending was taking hold.

Selective Price Control

Discussion of the appropriate price-control policy at this time was almost unanimously in favor of selective control. The policy of imposing control at each spot where inflationary pressure developed recommended itself for several broad reasons. First, the appropriate means for the control of general inflation is fiscal policy. If the aggregate demand is held to levels that roughly match the supply, direct control of prices is needed only in local bottleneck areas. There was considerable slack in the economy and inflationary pressure was spotty. The uneven character of the expansion in this period is indicated by the 600 per cent increase in the output of aircraft compared with the 3 per cent increase in flour. Also, time was required to build a staff and gain experience. To freeze prices across the board would have thrown an unmanageable relief problem into the lap of an embryonic organization.

Type of Action and Pattern of Control. Price actions during the period of selective control can be roughly classified into five major types. First, and most informal, were "Suggestions and Warnings" which put the members of an industry on notice that stabilization of their prices was expected and which usually carried the implication that more formal action would follow if necessary. A second informal type involved issuance of a "Fair Price List" to which the industry was requested to conform. A third type was the "Freeze Letter" addressed to the members of an industry, requesting that prices be held at levels which prevailed during a specific period. In a fourth type, the "Voluntary Agreement," the Office obtained an explicit agreement from individual producers relating to prices, margins, or the conditions of trade. Finally, formal price schedules were issued under Executive authority. When, after six months' debate, the Price Control act was finally enacted on January 30, 1942, 98 of the 105 schedules then in effect were reissued on a statutory basis.

Selective price control grew directly out of the defense program. The most serious pressures developed in metals and metal products. Of the 20 price ceilings issued during the first five months, about three-fifths by number and seven-eighths by value were in the field of metals. Equipping and housing a new army brought inflationary developments in lumber and textiles and, by the fall of 1941, several schedules were issued in these fields.

These early price actions acquired further controls to supplement and support them. Initially, it was possible to stabilize the prices of

virgin copper, zinc, and aluminum by informal agreements with the producers, but as shortages became more acute the prices of scrap and secondary metals rose above virgin metal prices. Consequently, ceilings were placed on most of the secondary scrap and waste materials.

Of the criteria established for the determination of maximum prices, possibly the two following are the most important: (1) The over-all profits position of the industry, rather than profits on individual products, is the relevant consideration as long as the price covers direct costs. Each industry is expected to absorb rising costs within the limits of reasonable over-all profits. Thus, iron and steel ceilings were maintained in face of a 10 per cent increase in wages. (2) The price need not cover marginal costs. The premium-price principle was adopted instead of the bulk-line-price principle of World War I. The outstanding application of this principle is the payment of premium prices for production of nonferrous metals above designated quotas based on 1941 output.

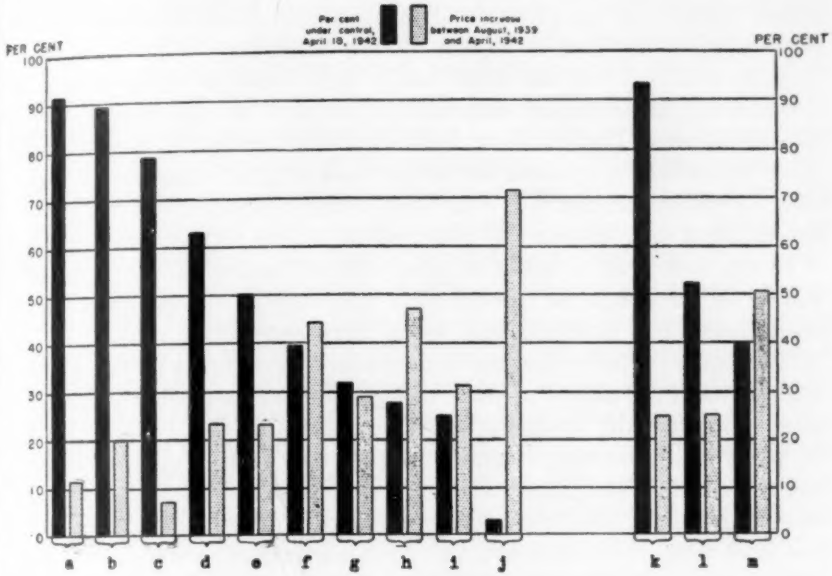
The fraction of the economy subject to control at the manufacturing and wholesale level was extended from one-fifth in the middle of 1941 to two-fifths by the end of the year. During the early months of 1942, informal price actions were replaced by formal schedules to an appreciable extent. The type of industry brought under control shifted with the spread of the inflationary pressure.

In the pre-Pearl Harbor period, price control was concerned almost exclusively with the basic materials of industry. Consumers' goods remained untouched with minor exceptions. During the period from January 1, 1942, to the General Regulation in May, the regulation of industrial products was extended. But the O.P.A. could no longer postpone coping with consumers' goods and they appeared in the controlled list with increasing frequency. Two-thirds of the thirty-odd regulations effective after March 1 involved consumer goods. This was a consequence of the fact that consumer purchasing power was rising rapidly while war production began cutting into civilian supplies.

Evaluation of Selective Controls. By value, roughly two-thirds of the schedules controlled prices at the manufacturing level, one-fifth controlled raw materials, and the remainder controlled semi-manufactured goods. Formal price ceilings were extremely successful in holding prices, once they were imposed. Informal measures were effective in many cases and not in others. Despite the fact that controls were imposed where inflationary pressure was strongest, flagrant violations were confined to scrap materials and waste products.

Selective price control has an indirect as well as a direct effect. Control of steel and copper prices, for example, exerted various degrees

of influence upon the prices of both finished products and raw materials. There is both a forward and a backward influence from the point of control. The latter, doubtless, is much the stronger. But as pressures grew, these indirect "effects" did not suffice. The stabilization of iron, steel, copper, and zinc prices did not, in the face of rising demand, stabilize the prices of automobiles and farm machinery. In



a = Metals and metal products
b = House furnishing goods
c = Fuel and lighting materials
d = Miscellaneous
e = Lumber and building materials
f = Textile products
g = Hides and leather products
h = Foods
i = Chemicals and allied products
j = Farm products

k = Semi-manufactures
l = Manufactures
m = Raw materials

Source: U. S. Bureau of Labor Statistics and Office of Price Administration

The Relationship between Price Increases and the Extent of Control: Ten Major Industry Groups and Three Principal Stages of Production

order to protect the ceiling placed on iron and steel in April 1941, it became necessary to control the price of pig iron in June, coke in October, and iron ore in April 1942. Schedule No. 7, Combed Cotton Yarn, led producers to shift to uncontrolled carded yarns which, in turn, had to be controlled.

Price control at the raw materials or processors' level is only a delaying action. The control of hides and skins in June 1941 postponed

but did not avoid the necessity for controlling the price of leather; the eventual control of leather in December postponed but did not avoid the need to stabilize shoe prices which were covered by the General Maximum Price Regulation in May 1942.

There is, of course, no reason to expect that control of the price-determining prices will stabilize the entire price structure when income payments are accelerating. In a forward direction, the control of key prices affects the supply side through stabilization of costs. On the demand side, the rise in income that is associated with rising prices may be checked. On the other hand, there may be some increase in demand for uncontrolled commodities because of spill-over from the controlled area. The strongest indirect effect is probably in a backward direction, where it operates on the demand side to reduce the maximum bids for raw materials. But even here strong producers will outbid their less efficient competitors and raise prices, unless supplies are allocated.

In the first year of selective price control ending March 1942, two-thirds of all industrial goods were controlled. All wholesale prices other than farm products and foods increased 11 per cent.

The figure on the preceding page shows a remarkable inverse correlation between the extent of price control and the magnitude of the price rise. Although the grouping of commodities is the familiar Bureau of Labor Statistics classification, the case may seem prejudiced in favor of price control. The prices on the left are characteristically less sensitive to changes in demand than those on the right. Nevertheless, war is the one time when this characteristic difference between the behavior of depression sensitive and insensitive prices breaks down unless prices are controlled.[2]

The General Maximum Price Regulation

The most extensive step in the history of price control in this nation was the GMPR, effective in May 1942. This regulation applied to all levels—manufacturing, wholesale, and retail—and covered every commodity, both domestic and imported, not covered by a separate regulation or specifically excluded. Control was extended to about 60 per cent of the food budget, to most other retail sales, and to more than three-fourths of manufacturing and wholesale trade. The commodities excluded were (1) those excluded by the Price Control act itself, such as books and newspapers; (2) some primary raw materials, such as logs and mineral ores whose prices were indirectly controlled by ceilings at later stages of production; (3) commodities with no organized markets,

[2] See the diagrams in the writer's note, "Rigid Prices, 1890-1933," *Jour. of Pol. Econ.*, Vol. XLV (Oct., 1937), pp. 651-61.

such as fresh fish and objects of art; (4) and, most important, farm and food products that had not reached the limitations of Section 3 (a) of the act.[3]

In view of the overwhelming opinion in favor of selective price control at the time of its adoption, an explanation of the shift to a general ceiling is called for. The answer is that Pearl Harbor completely changed the magnitudes. A defense program was converted into a war program. Given sufficiently flexible fiscal powers, selective price control remains the logical solution to bottleneck inflation. But there is no real likelihood of the severe use of the fiscal weapon that is required to prosecute a modern war. In fact, if the morale factor is taken into account, it is open to question whether or not the over-all prosecution of the war would benefit from the unlimited use of the fiscal powers.

Subsidiary factors affecting the decision were (1) the necessity for moving into the control of retail prices which is far more difficult to handle on a piecemeal basis than is control at the manufacturing level; (2) the fact that a more adequate staff was available; (3) a frank recognition of the tendency for prices to edge upward through personal pressures involved in the wide dispersion of administrative authority.

By the spring of 1942, the facts were compelling. Inflationary pressures spread throughout the economy so that all components of the wholesale price index were turning sharply upward with the exception of metals, which was 90 per cent controlled. Not only was the price rise spreading, it was accelerating as well. Raw material prices rose 4½ times as fast during the year beginning February 1941 as during the first year of the war. Prices of manufactured products rose 7 times as fast, clothing 3½ times as fast, and household furnishings twice as fast.

Perhaps the principal factor limiting the effectiveness of selective price control was the rapid acceleration in income payments. Even though cost increases were restrained appreciably by the control of key-commodity prices, the acceleration in demand continued. In the early months of the war, income payments increased at an average rate of one-half of one per cent a month. This rate doubled from April to November 1940, and tripled and quadrupled thereafter. The slack in the economy which had absorbed so much of the initial impact of the war program was disappearing. The nation faced a further acceleration of war expenditures, on the one hand, and a savage cut in civilian supplies, on the other.

[3] The act very carefully protected not only primary farm products but Section 3 (c) provides: "No maximum price shall be established or maintained for any commodity processed or manufactured in whole or substantial part from any agricultural commodity below a price which will reflect to producers of such agricultural commodity a price for such agricultural commodity equal to the highest price therefor specified in subsection (a)."

The decision to control retail prices offered a basic choice between margin control and the freezing of prices as of some base date. The latter was adopted because it appeared to offer more effective control. But the freeze technique raises at least four difficult problems. First, there are many cases of hardship where the prices of individual sellers during the base period were out of line with their competitors. Second, there are unstandardized and seasonal commodities not produced and sold in the base period. Third, there is danger of irrational geographical differences in base period prices which, if frozen, will starve some areas. Fourth, there is the problem of disparities in both the horizontal and the vertical price structure.

Horizontal Price Balance. A few years ago, Gardiner Means attracted considerable attention with his analysis of "administration dominated" and "market dominated" prices. The core of his analysis was a chart which arranged wholesale prices in five groups on the basis of frequency of price change. A high degree of correlation was shown between frequency and magnitude of change. It is unmistakably clear that the price structure is drastically altered by depression conditions and that a characteristic dispersion occurs among the commodity groups classified according to depression sensitivity. Declining production and employment in the great depression, and again in 1938, were directly associated with a drastic widening of the spread between those prices that are sensitive and those that are insensitive to changing levels of demand. Contrariwise, the improvement in economic conditions culminating in the spring of 1937, and again during the war, has led to a closing of the gap among the five classes of prices grouped according to depression sensitivity. It is of interest, therefore, that the dispersion was almost entirely eliminated and that prices had regained the balance as well as the level of pre-depression days by March 1942. On a 1926-29 base, the A, B, C, D, and E groups in March 1942 were 100, 100, 100, 108, and 96, respectively.[4]

While it is true that, in detail, the requirements of a war economy are markedly different from those in a peacetime boom (that is, guns are needed instead of automobiles), it is true also that, broadly speaking, war requirements are similar to those of a peacetime boom. Both are periods of heavy capital building and require large supplies of metals, chemicals, and other raw materials.

Vertical Price Balance. Retail prices during a period of rising prices are not fully adjusted to current replacement costs, but are, to some extent, based on the wholesale and manufacturing price of some earlier period when stocks were purchased. The magnitude of the retail lag

[4] These indices are discussed in ***The Structure of the American Economy,*** National Resources Committee, June, 1939, p. 389.

depends upon the extent to which retail prices are based on inventory costs rather than replacement costs.

In order to find out if the squeeze on retailers was of manageable proportions, two independent estimates were made of the maximum potential squeeze. The first method compared the rise in wholesale prices with the corresponding rise of retail prices of comparable items. The second method compared current wholesale prices with wholesale prices at some earlier date determined by the price lag. The lag was derived from the turnover period.

Between June 1939, and March 1942, the special wholesale price index[5] rose 30.5 per cent while corresponding retail prices rose 26.6 per cent. In order for retailers to enjoy the same percentage increase in price as wholesalers, it would have been necessary to roll back the wholesale price level 3.9 points, or 3 per cent. The estimated wholesale cost of retail sales[6] amounted to 22.39 billion dollars, 3 per cent of which is 672 millions. The real potential squeeze would be considerably less than this maximum because retail prices would not need to rise as much as wholesale prices in order to maintain margins. Furthermore, all the historical evidence indicates that retail prices do not move as much as wholesale prices.

The alternative method was to determine the average lag by type of retail outlet. If retail prices were based on average inventory costs, the average lag would be approximately one-half the average period of stock turnover. Thus, if the number of stock turns for a year in a particular type of retail outlet is three, the average period of stock turnover is four months. Consequently, the average price lag is two months. Current wholesale prices were compared with wholesale prices two months earlier. The results of this method gave a maximum potential squeeze of 617 million dollars. A further check was to estimate the squeeze by commodity groups (rather than type of outlet) in terms of average price lags. Here again, the results were very close.[7]

The retail price squeeze in March 1942 was relatively low because wholesale and manufacturing prices had already been controlled at

[5] The wholesale price data of the Bureau of Labor Statistics are really manufacturers' and packers' prices. The lag and the squeeze thus represent the lag in the distribution field rather than between wholesale and retail prices.

[6] Excluding nonmanufactured foods and meats for which the turnover is so rapid that retail prices are always close to replacement cost.

[7] The second method of computing the squeeze compares current wholesale prices with wholesale prices at some earlier period, determined by the average lag, while the first method measures the squeeze by the difference between the percentage increase in wholesale prices and in retail prices since the base period, June 1939. Thus, Method I assumes that (a) the percentage mark-ups were the same, both at the beginning and end of the period covered, and (b) that average inventory costs and replacement costs were identical in the base period.

January 1, 1942, prices or earlier for one-third of all commodities. Furthermore, retail prices had risen more rapidly than wholesale in the months immediately preceding the March base period.

Further Developments. More than half the wholesale index was controlled prior to the General Maximum Price Regulation. These controlled prices had risen 25 per cent between August 1939 and May 1942 (almost entirely before control was imposed). An additional 25 per cent of the index was controlled by the GMPR; these prices had risen 28 per cent. The uncontrolled segment of the index—farm products and foods—had risen 66 per cent.

As the following tabulation shows, the group that was uncontrolled before the GMPR increased twice as fast after Pearl Harbor as before, while selective control was slowing down the rise of the controlled group. But it was farm products and foods (which remained uncontrolled after issuance of the GMPR) that had risen most rapidly.

AVERAGE PERCENTAGE MONTHLY INCREASES IN CONTROLLED AND UNCONTROLLED WHOLESALE PRICES (B.L.S.)

Period	Commodities Controlled Prior to GMPR	Commodities Controlled by GMPR	Uncontrolled Commodities
From August 1939 to April 1941	0.5	0.4	0.8
From August 1939 to Pearl Harbor	0.8	0.6	1.4
From August 1939 to May 1942	0.8	0.7	1.6
From Pearl Harbor to May 1942	0.5	1.2	2.0
From May 1942 to September 1942	0.1	0.2	0.6

The GMPR has been successful in that the price indices of the controlled commodities were stabilized.[8] Controlled foods, representing 60 per cent of the wholesale index, were unchanged between May and August; uncontrolled foods, on the other hand, rose 10 per cent. The wholesale price level was stable between May and August after rising at an average monthly rate of 1.55 per cent from the spring of 1941. The small rise in the cost of living was due almost entirely to the rise in uncontrolled foods. Since May 1942, individual industry regulations have replaced much of the GMPR and new schedules have further extended the coverage.

One of the goals of effective price control is to name specific maximum prices in the regulation. It was possible to achieve this goal in almost half of the 90-odd schedules issued during this period. Producers' goods and standardized articles were relatively easy to handle, but new

[8] There is some evidence to indicate the downward lag of a short inventory cycle, following issuance of the GMPR, which helped temporarily to relieve the pressure on prices.

products and stylized merchandise required an alternative to the base period method of setting maximum prices. This, together with the fact that costs remained uncontrolled, forced the O.P.A. to adopt variations of the cost-plus formula.

These formulas have been used principally in the food field, where most farm prices remained uncontrolled, and in the clothing, where there is a notable lack of standardization. Prices of women's outerwear garments, for example, could not be priced by the March base period provided in the GMPR because fall clothing was not being made or sold in March. Moreover, because of style changes, prices could not be based on the 1941 season. Schedule No. 153 provides a cost-plus formula. The manufacturer's price is his cost plus his average percentage margin on garments in the same category sold in the 1941 season. Manufacturer's cost is the replacement cost after June 14, 1941, or the actual cost—whichever is lower—and includes labor cost at the wage rates of 1941-42, plus increases unconditionally granted prior to the issuance of the GMPR. The dealer's price is his actual cost plus the dollar mark-up taken by him on the largest number of garments of the same category sold in the 1941 season. The complexity of such formulas is, in itself, an obstacle to their effectiveness. It is to be hoped that they are only temporary.

The policy decided upon when the GMPR was issued was to hold the retail price level and to make necessary adjustments (a) by reducing prices at the earlier levels or (b) by using subsidies. Prices have been reduced in many cases. Subsidies are now being paid on a number of commodities, including coffee, cocoa, shortening and oleomargarine, sugar, petroleum, copper, lead, and zinc. However, difficulties with the subsidy program and the formula pricing-schedules referred to above have opened the way to a substantial breach in the March ceilings of the GMPR.

The administration of price control was hampered by the delay in the other parts of the inflation-control program. The GMPR was never intended to stand alone. Direct price control deals only with the effects. Rising income, the basic cause of inflation, was still cumulating upward. When the GMPR was announced, the President sent to the Congress a 7-point program requiring heavier taxes, reduced spending, and the stabilization of wages and farm income.

Despite the ceiling prices over a large fraction of the price structure, failure to deliver the other parts of the program jeopardized the existing controls. More adequate provision for subsidies and stabilization of wage rates and farm prices were particularly needed. Actually, these go hand in hand. Control of the cost of living is dependent upon income stabilization and income stabilization cannot be achieved without controlling the cost of living.

Farm Prices

The explanation of why effective price control was impossible under the original Price Control act calls attention to two extremely interesting and fundamental aspects of the parity price ratio.

The Price Control act, among other special restrictions, prevented the control of farm prices below 110 per cent of parity. Farm prices, which were unusually low when war broke out, were up 72 per cent in June 1942: The over-all parity ratio stood at 99, but the restriction applied to individual products.

It was estimated that, provided prices paid by farmers were rigidly controlled, the value of farm marketings would need to rise 2 billion dollars from June 1942 levels to reach the 110 per cent limit. But because of the necessary structural relationship among farm prices, it is not economically desirable to control all farm prices at 110 per cent (or at any other fraction) of parity prices. Meat prices were 25 per cent above parity, but feed prices were 25 per cent below. If feed prices rose to 110 per cent of parity, production goals would require that meat prices be permitted to rise further even though already out of bounds. The necessity for maintaining the supply of meat would add an additional 3.8 billion dollars to the value of farm marketings.

Parity price, of course, changes with the index of prices farmers pay. The parity index is not a ratio between farm and industrial prices but between prices received and prices paid by farmers. The surprise comes in the fact that a large fraction of the index of prices paid is farm products.[9] As a result, changes in the numerator almost automatically produce a smaller change in the denominator in the same direction. Thus, a rise in farm prices causes a smaller rise in the parity ratio because, at the same time, it has raised prices farmers pay. Were all non-farm prices rigidly controlled, the parity ratio would rise, within limits, as farm prices rise. Taking account of this interaction between farm prices and the prices farmers pay, the total increase in value of farm marketings permissible under the act would be, not 5.8 billion dollars, but 7 billions, which would increase retail values of food and clothing by over 8 billions, or 23 per cent.[10]

The same calculation was made assuming that corn prices rise to 110 per cent of parity and that other grains, which are now further below parity than corn, rise proportionally with corn. Of course, this would add less to farm values, the estimate being 1.7 billion dollars, and a further 2 billions for maintaining the feed-meat ratio. The inter-

[9] Feed and seeds have a weight of 12 per cent, and the raw component of food and clothing is equivalent to a weight about twice as great.

[10] Raymond Mikesell expects to publish a more comprehensive analysis of these relationships.

action between the numerator and denominator of the parity ratio would add a further 0.7 billion dollars to farm values. On this basis, farm values under the act could rise 4.5 billions and retail food and clothing values, 5.4 billions, or 16 per cent above June 1942 levels.

These estimates demonstrate that it was not possible to control inflation under the 110-per-cent-of-parity limitation.

Similar estimates show that parity ceilings would permit the value of farm marketings to rise 0.9 billion, the feed-meat ratio would add a further 3 billions, and the interaction one billion. The total rise of 4.9 billion dollars would increase retail food and clothing prices 16 per cent. If corn prices rose to parity and other grains rose proportionally, the corresponding estimate is 0.6 billion added to the value of farm marketings, 1.6 billions by the meats, and 0.5 billion by the interaction. The total increase of 2.8 billions would increase retail food and clothing prices 10 per cent.

It seems possible to live with parity only if feed costs are maintained below parity levels. The difference to farmers can, if necessary, be made up by subsidy payments. But this is a critical problem. The fact is that cash grain growers are now relatively better off with their prices 25 per cent below parity than are meat raisers with prices 25 per cent above parity. On a 1910-14 base, the 1942 net income of cash grain growers is estimated at 402, and that of hog-beef raisers and fatteners around 338.[11]

It is unrealistic to assume that other prices can be held rigid while farm prices are permitted to rise in the magnitudes indicated. The rise in farm prices not only generates additional farm income but also raises the food budget, thus rendering wage control more difficult. It would be impossible to prevent general upward wage adjustments with further rises in the cost of food and clothing of the magnitudes indicated above. Actually there was no limit to the rise in prices permissible under the 110-per-cent-of-parity provision in the act.

Wages

Wage costs have only recently become a major inflationary force. Unit labor costs did not rise in the first half of the period since August 1939. The substantial rise in the latter half has largely been absorbed out of profits; it has reached the price level in relatively few instances. On the demand side, however, the magnitudes speak for themselves. Wage income to May 1942 increased 79 per cent.[12] While real hourly earnings for all nonagricultural establishments were practically unchanged from August 1931 to May 1942 there are sharp differences

[11] See the Second Quarterly Report of the Office of Price Administration.

[12] Farm income is up in about the same proportion. Profits are up 265 per cent before and 65 per cent after taxes.

among the various industries. Manufacturing payrolls increased 130 per cent; employment rose 38 per cent, hours lengthened 12 per cent, cash hourly earnings rose 31 per cent, and cash weekly earnings 53 per cent.

In general, the increase in wage rates appears to have accounted for roughly one-fourth of the additional wage income. It is perfectly clear that stabilization of basic wage rates will reduce the acceleration but not stop the rise in wage income. There is, however, a limit to the longer hours and shifts to higher grade employment but no similar limit to rising wage rates.

By holding the lid on prices, the O.P.A. undoubtedly held down wages. But there were two serious limitations upon the indirect control of wages through the control of prices. First, a large and rapidly expanding sector of the economy was producing war materials over which the O.P.A. exercised little or no control. Second, profits were sufficiently fat in some sectors to permit wage increases without price adjustments. And these, in turn, would require a balancing wage increase in other areas where the adjustment could not be made out of profits.

The President's message to Congress on April 27 had called for the general maintenance of wage scales with (1) adjustments for inequalities and (2) elimination of "substandards of living." Nation-wide "stabilization" agreements which initially raised rates were subsequently negotiated in the shipbuilding and construction industries. The War Labor Board's most important decision was the Little Steel Case which provided that workers whose wage rates had increased less than the 13 per cent rise in the cost of living from January 1941 to May 1942 were entitled to have their "peacetime standards reestablished as a stabilization factor."

It was these facts which led the O.P.A. to take the toughest attitude in Washington toward wages.[13] Perhaps the most disturbing fact was the continued adherence to the collective bargaining principle in the face of general administrative determination of prices. The same forces which require wartime control over prices also require the administrative determination of wages. If management and labor are permitted to bargain over the distribution of the product, the government very shortly finds itself paying the bill. In addition, the entire system of war controls is endangered. War profits are abnormal; they should not be industry's to bargain away, nor labor's to demand. In order to function appropriately collective bargaining must operate under more normal conditions.

[13] O.P.A.'s wage policy was not taken without a great deal of soul-searching. It appears desirable to maintain labor's share of total income and to raise wages in the sweated trades but doubtful if both can be accomplished. Space does not permit development of these problems.

Rent Control

Before the passage of the first Price Control act, the O.P.A.'s activities were limited to advising Local Fair Rent Committees. On March 2, 1942, 20 areas in 13 states were defined as Defense Rental Areas. As a part of the GMPR, 302 areas with a population of 86 million people were added to the program on April 28; in the other one-fifth, rents were rolled back to earlier dates. Between May and September 1942, the rent component of the B.L.S. cost of living index declined from 109.2 to 107.6 (1935-39 = 100). This, of course, represents a very substantial reduction in rents in the specific properties affected.

Rent control, to date, appears to be one of the O.P.A.'s outstanding achievements. On October 5, when 45 additional areas were designated, practically the entire country was included in the program. The act requires that local governments be given a 60-day period within which to stabilize rents. Federal control does not become effective until 60 days after the O.P.A. has designated the rental area. The act now limits rent control to residential properties. It appears likely at the present writing that the Congress will include business properties as well.

Conclusion

The act to amend the Price Control act, passed after bitter controversy on October 2, represents a definite improvement in the prospect for effective control of farm and food prices. An Executive Order has paved the way for stabilization of wage rates.

It goes without saying that prices could have been more effectively controlled with a more flexible fiscal policy, with the earlier regulation of farm and food prices, with wage stabilization, with more subsidies, with inventory controls, with allocations and rationing of consumer goods. Within the framework in which it has operated, however, price control has been successful. The unparalleled expansion of production has been helped rather than hindered by price control. In the face of similar pressures we have had nothing approaching the inflation of World War I.[14]

The success of the program is due, on the one hand, to a series of bold policy decisions, and, on the other hand, to the fact that, despite

---

[14] Percentage Increase in Prices During First 37 Months of War

	All Wholesale	*All Wholesale Except Farm and Food*	*Metals and Metal Products*	*Cost of Living*
War I	85	85	120	30
War II	33	19	11	19

We have now mobilized our resources to about the same degree that had been reached at the end of World War I.

pinches here and there, price control to date has left generous elbow room for profits. The 78 per cent expansion of output, together with the change in its composition, has made it possible to limit the price rise to 19 per cent and, at the same time, industrial profits before taxes have risen 265 per cent in the face of moderately rising costs.

There have been four major policy decisions that required a courageous price administrator: first, to hold steel prices in the face of a 10 per cent wage increase in the spring of 1941; second, to issue the GMPR while farm prices and wages were remaining uncontrolled; third, to meet the wage issues squarely; and fourth, to seek more effective control of farm prices in the face of determined and powerful opposition.

Price control has inevitably been less effective than the indices show. There are countless forms of hidden price increases. But within limits, quality deterioration is the least harmful form of raising prices for, in this way, the cumulative character, which is the critical aspect, of inflation is avoided.

There are now in operation three broad types of price regulation. First, there are the schedules tailored to fit individual industries, the majority of which were issued before the GMPR. Some of these now need to be refitted. Second is the GMPR which has now outlived its usefulness. It should be replaced by schedules designed to fit the specific industry and trade. A third type is the series of regulations by price formula. These were expedients employed to bail out of problems created by the GMPR. They are unsatisfactory and are being replaced.

The second Price Control Act, which became law on October 13, 1942, made possible a significant extension of price control. Temporary Maximum Price Regulation No. 22, issued immediately thereafter, went far toward bringing the remaining uncontrolled prices under maximum ceilings. Eighty-five per cent of the economy at the manufacturing and wholesale level is now subject to price control. Uncontrolled commodities consist mainly of two-thirds of all farm products (those which have not reached parity) and less than 5 per cent of all foods (leafy vegetables and highly seasonal crops). Price control has now been extended to approximately 90 per cent of the average family's food budget, to practically all other retail commodities, and to many services.

Price control is now almost complete as far as coverage is concerned. The arduous job still ahead is holding the price level in face of rising demand, on the one side, with reduced supplies and rising costs, on the other. There will no longer be, as there has been in the past, a reservoir of rising profits to ease the pinch.

Effective price control must be enforceable by consumers. For this purpose, price regulations need to be sufficiently simple that consumers

can find out what maximum prices are. At the same time, the regulations must be reasonable to producers and recognize the complex structure of the various industries and trades. Meeting these dual requirements is the task on which the O.P.A. is now engaged.[15]

The acid test for direct price control is still ahead. To be successful it will need to be supported by a rationing program.

[15] A step was taken in this direction in the recent revision of Schedule No. 148 which fixed specific dollar and cents prices for more than 90 wholesale pork cuts and established 3 geographical differentials.

PRICE FREEZING UNDER THE OFFICE OF PRICE ADMINISTRATION

By VICTOR ABRAMSON

The General Maximum Price Regulation, promulgated by the Office of Price Administration on April 28, 1942, reversed a year-old policy of selective price control based primarily on cost and profit considerations. The existing explicit price schedules covering a number of specifically defined commodities were mainly continued, but to the remainder of the economy the new regulation applied, with a group of important exceptions, a general "freeze" of the prices of all goods and services at the highest levels at which actual deliveries or offers were made during the base-period of March 1942. The areas directly affected by this new control were primarily the retail sales of commodities and services, though manufacturing and wholesaling were directly influenced in many cases and indirectly in others.

The record of administration of this regulation has been one of continued retreat from the declared objective. In almost the first days of its life, a procedure was established for adjusting the individual retailer's prices upward to the going-level for specific classes of sellers in particular communities. The same principle was later applied to wholesaling and manufacturing. There followed a succession of amendments authorizing increases in the general level of prices for particular commodities, and establishing the governing principle of replacement costs plus customary *rates* of markup for certain groups of seasonal, new and unstandardized commodities covering a wide range of both consumer and producer goods.

On the enforcement front also difficulties were encountered. The educational task proved to be a formidable one, particularly at the retail level where the most severe problems had been anticipated. The control of services raised almost insurmountable difficulties. Comprehensive price freezing is at best extremely hard to enforce. The impracticability of the particular plan which was adopted, however, together with the inordinately obscure and unnecessarily complex language of the regulations, and the frequency with which they were

EDITOR'S NOTE: The author was formerly with the Office of Price Administration and is now with the office of Alien Property Custodian. The opinions expressed are the author's personal views and do not necessarily reflect the views of the Alien Property Custodian or the O.P.A.

amended and even basically modified in principle, added greatly to the difficulties of securing compliance.

Price control is most equitable and most effective where both the buyer and the seller know precisely the price which has been established. The clearest regulations are those in which the control agency names the actual prices which are fixed and identifies the commodities which are affected. If the seller is required to post lists of these governmentally determined prices, buyer knowledge will provide a strong enforcement influence. In the absence of sufficient information concerning actual transaction prices, the only choice in price freezing is to establish rules under which the seller determines and declares his own maximum prices. To be effective, these rules must be simple and clear and require the use only of readily available information. The posting of prices will in these circumstances serve no purpose beyond that which is served through the marking of the commodities, because the maximum prices are set by the seller in accordance with his interpretation of the regulations.

The O.P.A. chose to establish principles for individual price determination, rather than explicit price schedules, in its plan of price freezing, though it did retain existing schedules which presumably reflected actual transaction prices. Not only did it allow the individual seller to set his own prices, but it offered him the choice of a range of conflicting principles for making these determinations, and required him under some conditions to make use of information not easily available. The circumstances under which one or another principle was to apply were defined in the regulations, but the seller was left with important discretionary powers to decide which plan to follow. Moreover, the choices were such as to invite evasion of the purposes of the control.

Where a seller actually sold and delivered a commodity in March, the highest transaction price during the month was clearly to govern all future transactions. Where the commodity was dealt in but no deliveries were made, the highest offering price during the month was to control subsequent sales. Complications arose, however, when commodities not offered for sale during March were handled in a later period. In an effort to relate all maximum prices to March transactions or offering prices, the seller was required to base his prices for products not dealt in during the base-period, first, on the delivery or offering price "for the similar commodity or service most nearly like it" in which he dealt. If he did not deal in the same or similar commodities during March, he was asked to determine his "most closely competitive seller of the same class," and base his prices on the highest price charged by that competitor for the same product or service during March; and, if no charge was made by that competitor for the same

1942] ABRAMSON: PRICE FREEZING UNDER THE O.P.A. 763

product or service during March, the charge for the similar commodity most nearly like it was to govern.

If in the seller's judgment he could not price under either of these provisions, he could in the case of wholesale and retail transactions follow a wholly different plan of maximum price determination. He was allowed at his own discretion to select some commodity in the same general classification and price range which he actually sold in March, or a similar one which he actually sold, to calculate the *percentage* markup over the replacement cost of that commodity, and to add the same *percentage* markup to the *replacement* cost of the commodity priced under that provision. In the case of other than wholesale or retail transactions, the seller was allowed to apply to the O.P.A. for an alternative pricing method if in his judgment he was unable to price under the existing provisions.

Problems of Administration

While an effort was made to define the terms "similar commodities and services," and "most closely competitive seller of the same class," the seller was allowed a wide range of individual judgment in choosing a product or competitor which would yield him a high price for any product not sold or offered for sale during March, or of shifting to a replacement cost basis in pricing these commodities. Under this principle of control, maximum prices would vary with the chance component of similar products handled during the base-period by the seller and his competitors, with the particular competitors who happened to exist at the time, and with the interpretations of "similarity" and "competitiveness" which the individual seller chose to make. The range of discretion which was thus provided created an inducement to shift to the manufacture or handling of new commodities in order to escape the more stringent provisions of the regulation, and held forth an invitation to "misinterpretation." This constitutes a particularly serious threat to the effectiveness of the control in those industries in which new products are being manufactured under the stress of wartime material shortages and conservation measures. Moreover, because it was impossible to avoid a recognition of style, brand, and design differences, evasion of the regulation may be relatively easy in many industries. In meeting this problem, it will be almost impossible to avoid either the obstruction of desirable changes in output or unworkably detailed regulation.

It is difficult to believe that anyone could seriously have expected sellers to be able to determine accurately their competitors' maximum actual transaction or offering prices during any period, or the most nearly comparable products which they handled. Moreover, the regu-

lation did not specify the sort of evidence which would be acceptable as an indication of competitors' prices, nor in what degree the "closeness" of the competitor was to take precedence over the "similarity" of the product. In an effort to define this provision more explicitly for retailers it was, furthermore, later negated and reduced to an absurdity. The bulletin *What Every Retailer Should Know About the General Maximum Price Regulation,* in explaining how a retailer should determine the "similar" article carried by a "competing" retailer, stated as one condition that it must have been "sold by the competing retailer at the same price or in the same price line as he [the retailer determining his price] would have sold the article being priced had he carried it during March" (p. 14). This means that the price-basis is the retailer's statement of what his own price would have been, rather than the actual price of a competitor, in a provision designed originally to establish prices in accordance with the actual transactions of competitors.

Perhaps the most serious danger to the effective administration of the regulation was the failure to reach many retailers with an understandable interpretation of its provisions. An active campaign of educational group meetings was conducted with varied success. To meet the many detailed problems which arose, a profusion of question-and-answer interpretations was issued, the effect of which was often to clarify the particular question while leaving in even greater doubt the treatment of slightly different situations. This procedure led to the prescription of rules for unnecessarily minute differences, and to a greater and greater rigidification of existing practices. For example, an effort was made to maintain departmental differences in the prices of an identical product within a single store and existing differences between private and national brands, and even to require a retailer who, during March, had sold similar articles purchased in the same lot in different price lines to continue this distribution between price lines in future purchases. Futhermore, one interpretation of the regulation forbade retailers from selling a new brand at a price higher than the March price for the lowest price brand carried in that month. A great deal of time and effort was devoted to the task of securing compliance with the posting provisions, under the mistaken impression that requiring the retailer to post prices which he himself determined, and which he had already marked on the individual articles, would contribute to enforcement. The results of all these efforts left many retailers unenlightened concerning their responsibilities. There was greater success in the wholesaling and manufacturing fields, but even here it is doubtful whether many understand the regulations.

Under any plan of freezing prices at their existing levels, problems

will arise because of the fact that some commodities were not sold during the base-period, because others were sold at unprofitable or extraordinarily low levels, and because there is often a great disparity in prices among individual sellers even in a single community. The O.P.A. quickly encountered all of these difficulties in the administration of the General Maximum Price Regulation.

There was an almost immediate protest from many who claimed that they had been selling certain products during March at "sale" levels, and from retailers who alleged that they were being "squeezed" because they had failed to advance their prices fully to compensate for recent increases in wholesale costs. Manufacturers of seasonal commodities who had no March offering prices, producers of commodities manufactured on an individual-specification basis, and producers of all products undergoing design or construction changes objected that the regulation did not provide a clear guide for the determination of their maximum prices. At the same time, producers who had not advanced their prices to cover recent cost increases, or who faced the prospect of increased material or labor costs which were not subject to control, opposed the principle of price freezing.

A variety of measures was developed by the O.P.A. to meet these difficulties. Retail prices were to be adjusted in individual "hardship cases" (defined as those in which a particular retailer was selling below his customary level and at a loss, with a resultant threat to his financial position) on the basis of specific applications. This principle of adjustment was later extended to similar cases in the wholesaling and manufacturing fields. After a confusion of conflicting declarations and counter-declarations, producers of certain groups of specifically defined "seasonal commodities" who had complained of marked cost advances since last season were allowed to price on a formula basis amounting to direct replacement costs plus the preceding season's rate of markup. In some instances, it was specified that the wage rates, material prices, and methods of cost estimation should be those in effect during March 1942. Similar formulas were also applied to certain nonstandardized commodities, and to some which were subject to unusual changes in specifications because of material shortages. In a few instances, the confusion was relieved by the establishment of explicit price schedules.

To meet the problem of the "squeeze," an effort was made to force a voluntary "roll back" or "roll forward" to equalize the burden of maintaining prices at March levels. Where there was no "surplus" at any level with which to absorb these burdens, it was hoped that subsidies could be made available to maintain output. These hopes were not realized, however. In some cases, where the outcry was most vociferous and the pressure strongest, price advances were allowed at

various levels of production and distribution. Increases in wage costs or in farm prices, which were left largely uncontrolled, sometimes formed the basis for these concessions.

The task of adjusting the prices of each individual retailer to the going-level for comparable sellers of similar products in his community is indeed a prodigious one, and one which is likely to be fraught with great dangers resulting from the lack of reliable data. There was some hope that the complaints and representations of individual sellers could be verified through shopping surveys in individual communities and through more general price information. Shopping surveys for each community in the land, however, would be wholly impracticable, and most general studies of price movements do not provide sufficiently detailed classifications of products and types of sellers to make them useful for this purpose. Moreover, if sufficient information of this character is available to judge the merits of particular complaints, it would be possible on this basis to establish explicit schedules, and thus avoid the confusing multiplicity of individual maximum prices and greatly improve the prospect of effective enforcement. The determination of the effects of the price freeze on the profits from the sale of particular products and the financial position of individual sellers would in the case of most retailers be an almost impossible task.

The formula-pricing principles which were introduced represented a reversion to the earlier principle of control on a cost-basis. However, the formulas which have been adopted do not consistently follow either actual costs or the costs of a given period. They are a hybrid of the two, representing a compromise of these conflicting principles. Where formulas of this character are not provided, the manufacturer who is forced to use more costly substitute materials, or less efficient labor, may be seriously harmed, because the "similar" product on the basis of which he must price these new products under the regulation has to be one of "fairly equivalent serviceability." If more costly new products are to be allowed correspondingly higher prices, there will be a problem of deciding whether to permit the older products also to rise in price. If they are not, price discrimination will result; if they are, there will be windfall profits.

The effort to provide subsidies to maintain output reveals one of the most significant dangers of price freezing. Where price controls are not related carefully to cost changes they are likely to operate perversely, causing uncontemplated and undesirable changes in output. On the other hand, a program of subsidization designed to counterbalance the defects of a price-control scheme will confront equal difficulties which call the entire plan of control into serious question.

It will obviously not be desirable to subsidize all production. Yet the

decision not to subsidize in the face of rigid price control may impose a death sentence on an enterprise or even an industry when demand conditions might under other circumstances have made possible its survival. The concept of "essential industries" is too greatly in dispute to make it of much service in establishing standards for subsidization. The political pressures and intrigues which are likely to result where extensive subsidies are employed, the encouragement to inefficiency in production which would be an ever-present danger under a program of this character, and the longer-range consequences of a filial reliance of industry on governmental support, argue strongly against the use of this device, particularly in view of the fact that the necessity for a subsidy in this case arises from the defects of another governmental control which may be corrected with less dangerous consequences. Moreover, a subsidy program can only contribute to inflationary pressures because of the enormous expenditure of government funds which it would require. It is true that government subsidies may represent merely an alternative to equal private expenditures. On the other hand, as is shown below, governmental expenditures, especially in time of war, are peculiarly likely to have an inflationary effect.

The lag of retail behind wholesale prices was found to be greater than had been anticipated. The roll back of prices to meet this situation was undertaken primarily on the basis of voluntary negotiations and, as might have been expected, met with considerable resistance. There were, however, several instances of success. When the effort to secure funds for subsidies failed, the entire program was jeopardized. Some upward adjustments were consequently allowed. That complaints have not been even more marked may perhaps be explained by the lack of familiarity or understanding of the regulations, and the consequent lack of effective compliance.

Quality Maintenance vs. Simplification and Standardization

There is a danger under any price control program that price advances will be cloaked by a reduction in quality. In dealing with this problem, the O.P.A. adopted a conflicting set of principles. It both encouraged and discouraged quality maintenance.

Where manufacturers and distributors complained that they were unable to cover their costs at the level at which prices were frozen, it was suggested that they reduce their costs by eliminating "frills" and reducing variety. Though in some cases the O.P.A. pointed to the War Production Board's conservation measures as providing cost-reducing opportunities, or made vague suggestions of its own, in many instances no positive standards or even general limits were set to control these changes. Yet, while these measures may make it possible to create the

illusion that prices are being controlled, their effect will inevitably be to promote an increase in prices through the substitution of a commodity or service of inferior consumer appeal.

Where manufacturers or distributors took the initiative in reducing quality or service, the O.P.A. sometimes followed the opposite policy. The offenders were taken to task for evading the regulation, and ordered to maintain quality substantially at pre-regulation levels.

Programs of standardization and simplification have long had support from those who regard their own judgments concerning commodity values and the economical use of income as superior to the buyers'. It is rarely possible to justify an imposed reduction in variety below that which will meet with consumer acceptance, though a strong case can be made for temporary controls of this character as a conservation measure, where there has been an abrupt and sharp reduction in the supply of some critical material or product, and where neither producers nor consumers may have adjusted themselves fully to the changed conditions. Viewed as a price-control measure, however, it is an unwieldy and insensitive device for compensating for cost increases, and the most deceptive and often least desirable means of allowing price advances. A better adjustment of prices and production can be assured if both are allowed to vary.

Quality maintenance, on the other hand, can in a certain form serve as an enforcement device for price control. It must, however, be carefully distinguished in this respect from proscriptions against the introduction of new products, with which it is often confused. The function of quality maintenance in a price-control scheme is to identify products by defining their specifications. This does not require restrictions against variety. New products always create new problems under price control, and, as we have seen, particularly difficult ones under the existing general freeze. The introduction of new varieties of production may not only be desirable, however, but necessary as a result of changes in material supplies or consumer needs, and it is scarcely defensible to prevent the best use of productive resources as a means of protecting a defective system of price control.

The difficulties of defining quality are greatest where the product is normally unstandardized, or where it ordinarily varies greatly from period to period. The control of services has, for this reason, perhaps been the most troublesome single problem under the general freeze.

Indirect Pricing Methods and Customer Differentials

Under any scheme of price regulation, it is necessary to control indirect pricing methods as well as the base-price itself. This was recognized under the general freeze by a provision requiring that "no seller

shall change his customary allowances, discounts or other price differentials unless such change results in a lower price."

A provision of this character works very well where discounts and allowances are used merely as a means of effectuating general reductions below the base-price. However, where these discounts represent compensation for services performed by the buyer, such control may have the effect of freezing unprofitable or undesirable forms of trade relationships. Similar difficulties will arise where the discounts represent a means of quoting price differentials to various classes of customers. Cost conditions or the utility of particular types of distributive channels may change, making any existing set of discounts obsolete. If they cannot be altered, some channels may be unnecessarily favored while others may encounter difficulties in securing supplies.

In handling the question of advertising allowances, the O.P.A. made an effort to distinguish between those which represent outright price concessions and those which support the performance of advertising by the buyer. It favored the former and allowed the latter on a discretionary basis. This is a proper distinction under a price-control scheme. There remains much to be done, however, in appraising the propriety of a wide variety of other indirect pricing methods, and in deciding appropriate regulatory measures for price-control purposes.

Control over War Materials

Special provisions were made under the General Maximum Price Regulation for controls over the prices of war materials. While at this time (September) the issue has not been fully settled, there has apparently been some disposition to exempt the heavier matériel and to control the lighter articles and sub-assemblies.

There is an advantage in controlling the prices of war materials, because the costs of governmental purchases represent the most significant influences affecting the course of inflation in wartime. On the other hand, the consequences of any obstruction to output which may result from price regulation are obviously much more serious in the case of war goods. It may even be contended, with some merit, that price control should be applied to civilian production while military output is left unregulated, as a means of promoting an expansion of war production.

Control of Exports and Imports

Export prices were subjected to controls similar to those which were applied to domestic transactions. This was necessary as a means of preventing an artificially induced outflow of commodities to foreign nations.

Difficulties arose, however, in defining precisely the transactions which would be regulated. Some commodities are sold abroad at wholesale, others at retail. Some are bought through agents here, others are ordered from abroad. Moreover, the costs and risks of foreign shipments have increased more markedly than have comparable domestic factors.

The general policy has been to allow for certain extraordinary expenses of foreign trade. The controls have been confined to the first level of transactions, and have been applied to purchases by American agents. Complaints have been widespread, however, that many costs have not been covered.

No direct controls have been applied at the earliest levels in the case of import transactions. Reliance has been placed largely on the repressive effects of controls at subsequent levels to exercise a limiting influence on import prices. Price regulations which obstruct the inflow of products from foreign countries will have an unfavorable influence on the war effort. Yet it is necessary to integrate these prices into the plan of domestic price control. We have been less troubled by this problem than have Great Britain and Canada, which rely more heavily on foreign sources for important materials.

The Over-all Earnings Basis for Price Adjustments

In determining the desirability of price adjustments, the O.P.A. has been guided almost from its earliest days by the over-all earnings of the individual concern. This policy is supported on two major grounds. It is favored as an instrument for the restriction of business profits, and it is accepted as an expedient means of setting prices so as to avoid the problem of allocating overhead costs. Under this policy, prices have been fixed at current levels and advances disallowed, or reductions required, so long as direct costs were covered and over-all earnings remained adequate.

The most serious criticism of over-all earnings as a basis for price control is that it provides no guide for the fixation of individual prices. This limitation does not become apparent until the over-all earnings position of a company is threatened, or the output of a product is seriously affected. Furthermore, it will lead to differential prices for identical products, and a product may be regulated when produced by some companies, but not when produced by others. Another set of difficulties will arise in administering price contol under the over-all earnings principle. Each time control is extended to a new product, or any existing fixed price is altered, it may become necessary to revise some of the other prices which have been fixed. Similar revisions may be required when changes occur in the supply or demand situation which

affect earnings on any of the products. Factors of this character are likely to be numerous and significant because of the many changes which war conditions bring in the supply of basic materials and resources, the efficiency of production, and the income position of buyers.

The over-all earnings basis for price control is least justified when regulation is extended to all, or nearly all lines of production, as it has been under the general freeze. In these circumstances, there should be no products which may be relied upon to carry the costs of others. Each of the controlled products will, therefore, have to be regulated separately on the basis of its own costs, even though firms with financial reserves may still be forced for a time to absorb losses on specific commodities.

Trends and Dangers

A great deal of what occurs in the future under the general price freeze will depend upon the success in securing funds for subsidies and an effective control over wages and farm prices, and on the degree to which excess purchasing power is absorbed through taxation and government borrowing. If these efforts should fail, it is doubtful whether direct price regulation covering so wide a range of commodities and services can be made effective.

Even if there is some considerable success in securing these supplementary measures, we are likely to witness a continuation of the trend toward explicit price schedules to replace the general freeze, and perhaps some upward price adjustments to compensate for cost changes. The profusion of variations and the dangers of evasion which result where each seller determines his own maximum prices are likely to grow increasingly unsatisfactory from an enforcement standpoint as new products are introduced. Essentially, this means a reversion to the earlier principles of control except in the range of its application.

The very range of these controls, however, is likely to prove their undoing. The sheer magnitude of the administrative task of adjusting all prices to changes in production, in costs, and in demands will scarcely be less than overwhelming. The danger of only limited and purely arbitrary action is, therefore, very great, particularly in view of the necessity for leaving much of the work to local officials in a program so vast as this. With no outlet for excess demands in uncontrolled areas, all of the pressures for change must spend their force within the sphere of control. If these pressures are not recognized, they will give rise to a series of black markets. Moreover, the extension of price controls will require an increased range of rationing. Rationing can operate to support price regulations. However, it creates equally difficult administrative problems of its own.

The failure to provide a satisfactory plan of price readjustment under the general freeze may prove disastrous. At no time have we experienced the necessity for changes in the structure of our production as pervasive as those with which we are now confronted, nor at any time has it been so imperative to insure the most rapid possible conversion of productive factors to new uses and their fullest and most effective employment. The necessity for preserving, in these circumstances, the clearest guides to action and the strongest incentives to maximum effort is plain.

A comprehensive scheme of price control has one important contribution to make to this objective. Where prices are fixed, there is less danger of a lagging in production because of uncertainties concerning costs, and there is less to gain from withholding supplies. Similarly, where wages are fixed, there is less of an incentive to transfer employment, with the consequent peril of time lost.

These advantages are likely, however, to be far outweighed by the evils of an all-embracing system of price control. Far from maintaining all prices and profits at reasonable levels and in proper relationship to each other, the result is likely to be the opposite. It will be almost impossible to avoid impediments to production resulting from the insensitivity of the controls to changes in efficiency and in demands, and to required substitutions of materials. Output will be governed not so much by what is wanted and needed as by what has been made profitable as a result of the price regulations. There will result undesired shifts in production and the obstruction of necessary and beneficial readjustments. The total effort is also likely to be adversely affected by the restricted opportunities for gain. Moreover, the business community is not likely to regard the future actions of governmental agencies as any less unpredictable than the competitive movement of prices.

The reasons for a shift from selective to over-all price control, and the use of the price-freezing technique, must be very strong indeed if they are to justify taking these risks. Practically speaking, the decision to extend the range of price controls so broadly can probably be traced to the notion that, if living costs were stabilized, demands for wage increases could be placated, a presumption which has proved ill-founded. The freeze technique was in a sense a measure of desperation, born of a lack of information and a lack of time for more sensitive controls.

Beyond these reasons for over-all price control, the primary support has been based on the presumed usefulness of this device as a means of controlling inflation, of regulating profits, and of keeping the real incomes of the low-income, fixed-income groups at a satisfactory level. The merits of this view we may now briefly consider.

The Prevention of Inflation

It is widely held that wartime inflation usually begins with price increases in the basic commodities and with wage increases for certain specialized types of labor, as a result of their scarcity in relation to the many new demands. The effect of these first increases, it is held, is to raise production costs and the costs of living, generally. These increases in living costs, in turn, provoke new demands for wage increases, thus touching off another series of increased costs and prices, and so on in a cumulative and progressive "spiral." This upward movement of costs and prices is likely to be sustained, it is held, by the increased borrowing and spending which are stimulated to meet the added production costs, and to be further strengthened by speculative purchases in anticipation of future price rises and loans made for this purpose. Were it possible to prevent the first price and wage increases resulting from scarcity, it is argued, the entire upward cycle of costs and prices might be forestalled.

There are, however, certain omissions in this explanation of the causes of wartime inflation and, consequently, certain limitations in the plan for its control. It seeks to account for a general expansion of the currency on the basis of increases in the prices of particular products, and for the incentive which is thereby created to press for wage increases and to extend borrowing and spending. Scarcities of particular types of materials, equipment, or services, however, are not likely to result in a general increase in prices. We know from experience that limited scarcity situations are always arising and that the pressure for wage increases is always present. Their usual effect, however, is to promote an expansion of supply through a diversion of resources, a tendency which grows stronger as the scarcity becomes more acute, and to bring about price declines for other goods and services, leaving the general level of prices unchanged. Only general shortages in commodities or, what is more pertinent in wartime, a general increase in demand such as is induced by an increase in the volume or velocity of circulation of money and credit can bring about a general price rise of an inflationary character.

In the theory outlined above, an attempt is made to meet this difficulty by arguing that in wartime scarcities are more widespread and pronounced in character, and that it is, therefore, easier to provoke a general expansion of money and credit. It is doubtful, however, whether particular scarcity situations can ever become so extensive or so severe as to promote a significant inflation of the currency, in the absence of other factors which have a more direct effect on the volume and velocity of the circulation of money.

There is, however, one factor which in time of war can, and often

does, operate directly to bring about an expansion of the currency. It is peculiarly true of governmental purchases that an increase in their costs may provoke an inflationary movement. Whereas an individual may be forced to meet rising prices by curtailed consumption, governments are likely to resort merely to new measures to finance expenditures, especially if they are for military purposes. The greater the disparity between actual and estimated costs, the greater is the likelihood that inflationary measures of finance will be employed; and once such inflation has got under way, the effect it has in increasing the costs of subsequent government purchases is likely to provoke an additional and progressive inflation. Perhaps even more important is the fact that a significant expansion of governmental expenditures may lead to inflationary methods of finance even though the prices of the goods purchased by the government are not allowed to rise. The resultant pressure for price increases is likely to become all-pervasive as the increased purchasing power is disseminated throughout the economy.

The objectives of preventing inflation can, under this theory, at most justify price regulation only for those goods and services which are important in the cost of living of the mass of the people, the basic raw materials of production, and government purchases. If in spite of these limited controls inflationary forces continue, price regulation will affect only the outward manifestations and not the causes themselves.

The Control of Profits

It is difficult to combine control over the prices of specific products with general profits control in the same regulation. Whereas price control must be applied to particular products or groups of products, the regulation of general profits is necessarily directed at the total operations of individual business units. As a result, where price control is the objective, uniform prices will be fixed on a product basis, while, where the purpose is to control general business profits, prices will be set on the basis of the specific costs and general income of particular operating concerns. These two purposes of control are likely to require greatly different prices for particular products. Moreover, the principle of regulating prices so that the over-all earnings of individual business enterprises will not exceed a level regarded as reasonable implies as a corollary that a sufficient number of the products manufactured by these concerns will be allowed to rise high enough to make possible the earning of a reasonable rate of return. The effect of this type of regulation will be to place a premium on inefficient operation and cost-padding and on the separation of efficient and inefficient operations

into different units; and it is certain to lead to dissatisfaction on the part of those who will be forced to pay the higher prices.

It is doubtful, moreover, whether the objective of general control of wartime profits can best be accomplished through price regulation. The effect of regulation of this character is to tax the general profits of a corporation and to turn the proceeds over to the particular buyers who may purchase the price-controlled products. While this form of regulation can be defended where the transference of gain is controlled through rationing, it is questionable under other circumstances. A simpler and more certain device for limiting general corporate profits is to tax them directly. Similarly, a more acceptable procedure for the protection of buyers is to impose controls on a product rather than a producer basis, so that all purchasers may be treated alike, supplemented by rationing where there is a desire to assign the gains from this form of control to particular buyers.

The Stabilization of Income

This leaves to be considered the usefulness of general price freezing as a device for the stabilization of income. No matter how successful the effort to absorb excess purchasing power may be, the supply and demand situation for particular commodities may, nevertheless, provoke precipitate increases in their prices. Those who have favored income stabilization through price control have generally confined their proposals to the low-income, fixed-income groups. It would be difficult to justify a broader extension of such a program. If price control is to be used only to stabilize these incomes, it will be unnecessary to extend the regulations as broadly as they have been under the general freeze. The control of certain basic elements of food, clothing and shelter would suffice.

Limited selective price control, moreover, has certain important positive advantages. The regulations can be framed more carefully so that they will be equitable, workable, and properly adjustable, and it is more likely that they can be enforced effectively. Necessary supplementary production control and rationing measures can be developed and applied more easily to a narrower sphere, to assure the proper incidence of the burdens and gains. The presence of an uncontrolled area of production will diminish the danger of wholesale breakdown of the regulations, and the nation can be spared the expense and bother of a huge and widespread administrative organization.

MONETARY THEORY AT THE TEXTBOOK LEVEL

By Arthur W. Marget

I

The jacket of Professor Reed's excellent textbook[1] announces the author's determination to depart "from the orthodox categorical and factual presentation of the subject" in order to provide "a better understanding of recent and revolutionary developments" not only in "monetary policies" but also in "*theoretical interpretation*"; and the Preface (p. vii) to Professor Halm's equally admirable text[2] announces a similar determination to present "a more detailed *theoretical* analysis" than is to be found in most texts on the subject.

A superficial thumbing of the two texts might easily lead to the conclusion that only Professor Halm has actually carried out his determination. For even a more careful reading of Professor Reed's text must reveal that he is primarily interested in precisely those "institutional and historical characteristics of the various money and banking systems" whose treatment Professor Halm, according to his own statement, wishes "to avoid as far as possible" (p. 38 n.; *cf.* also pp. vii, 46, 59), and in those "essential features of the banking *structure*" which Professor Halm, again in his own words, has introduced solely "by way of illustration" (p. vii). But to twist this conclusion to mean that Professor Reed's text has nothing to offer to those interested in the very same "theoretical problems" to which Professor Halm has devoted his "major emphasis" (p. vii) would involve serious injustice not only to Professor Reed, but to Professor Halm as well. For such a twist would represent nothing less than a dilution and perversion of the substance of "monetary theory": a dilution and perversion as characteristic of those unworthy disciples of Mr. Keynes who have misunderstood the implications of their master's decision, in his *General Theory,* to allow "technical monetary detail" to "fall into the background," as it will prove to be fatal to any hope of breeding a new generation of monetary theorists superior to the old.

Editor's Note: The author is professor of economics at the University of Minnesota.

[1] Harold L. Reed, *Money, Currency, and Banking.* (New York: McGraw-Hill. 1942. Pp. viii, 522. $4.50.)

[2] George N. Halm, *Monetary Theory: A Modern Treatment of the Essentials of Money and Banking.* (Philadelphia: Blakiston. 1942. Pp. xi, 347. $3.50.)

This will not be readily admitted by those whose precepts and performances remind one of schoolboys who dream of becoming great physicians and great lawyers as it were by divine inspiration, without the preliminary drudgery involved in mastering anatomical and physiological detail, on the one hand, or institutional legal practice, on the other. Such neophytes can confidently be expected to turn into economic "theorists" of the type pilloried by Bagehot when he spoke of some economists as being "like physicians who have never dissected, like astronomers who have never seen the stars." But there is more hope for him who will ponder the implications of Professor Halm's suggestion (p. vii) that the ultimate aim of his textbook, like that of any text in monetary "theory," is to further "the student's understanding of the *working of the monetary system*."

For to such a person, if he is intellectually honest, it must be immediately clear that, whatever else the attainment of such an "understanding" involves, it must involve also an accurate knowledge of all those processes and mechanisms which are what they are because of a set of specific *institutional and structural facts,* and which would be very different indeed if these institutional and structural facts were different from what they are. This, after all, constitutes at once the basis and the justification for a proposition, advanced explicitly by Professor Reed, which may seem to conflict, but does not in fact conflict, with his own implied disapproval, in his Preface, of the too *exclusive* desire of authors of some earlier texts on Money to provide what Professor Reed calls "little encyclopedias of financial institutions." Professor Reed's contention, indeed, is that, while monetary theory may in some respects be said to have suffered in the past from too exclusive a concern of this kind, it can also be said to have suffered in other respects from *too little* concern with the problems of what he calls (pp. 205, 468) "bank management," an understanding of which of course at once includes and is part of an understanding of the institutionally conditioned processes and mechanisms just indicated.

Since a complete survey of the evidence marshalled by Professor Reed in support of his contention would involve reproducing a considerable part of his book, it is obviously impossible to attempt such a survey here.[3] Fortunately, however, the task is made unnecessary by

[3] A few typical instances may be cited, however. See, for example, (1) pp. 205 *f.* of Professor Reed's text, on the relation of a "healthy solvency situation" of "the banks of the country" to the "flow of credit" and therefore to "deflations and depressions"; and pp. 348 *ff.*, on the relation, to the "solvency" of the banking system, of the condition of "overbanking" which, Professor Reed argues, prevailed "during the decade of the twenties"; (2) pp. 358 *f.*, 364 *f.*, on the effect of the canons of "soundness" followed by bank *examiners* in determining how "solvent" the banking system is, and therefore the degree of liberality which is likely to be shown in the extension of credit to business borrowers; (3) pp. 360 *f.*, 365, on the relation of the policy of supervisory authorities with respect

a consideration of the relevant aspects of the text by Professor Halm. For Professor Halm is too good a monetary theorist to present his discussion of the "theoretical problems" to which he devotes his own "major emphasis" as if this discussion could be regarded as displacing, or making unnecessary, the kind of discussion of mechanisms and processes under a given set of institutions which fills the greater part of Professor Reed's text. On the contrary, he makes quite clear, in his Preface (p. vii), that "the main object of this book is to *complement* such treatments"; and the proof that the two books do in fact complement each other in this respect can be tested by noting the number of instances in which they complement each other to the point of actual overlapping. On a strict interpretation of Professor Halm's professed desire to leave to "the works of other authors" (*cf.* p. vii) a treatment of the "institutional and historical" aspects of the subject of Money and Banking, one might expect Professor Halm to omit many topics dealt with only in a text like that of Professor Reed. Yet the following may be taken as a list of such typical topics which are treated also by Professor Halm:

1. The relation of Money to the "institutions" of Capitalism and Socialism generally, and the relation of given fiscal, monetary, and banking policies to the future of the institutions of private enterprise (pp. 3 *ff.*, 11 *ff.*, 94, 322 *ff.*; *cf.* Reed, pp. 1, 28, 298, 446).
2. The power of legal and political institutions (including the conferring of the legal tender quality) to affect the value of money (pp. 102 *ff.*; *cf.* Reed, pp. 28 *f.*, 486 *f.*).
3. The historical and material elements involved in the choice of the precious metals as "media of exchange" (pp. 25 *f.*; *cf.* Reed, pp. 3 *f.*, 8 *f.*, 41 *ff.*, 57 *ff.*, 106 *ff.*, 489).
4. The institutional assumptions of the metallist argument (pp. 14 *ff.*, 26 *f.*, 102 *ff.*; *cf.* Reed, 41 *ff.*, 58 *f.*, 140 *ff.*, 162 *f.*, 391 *ff.*).
5. The meaning of a "monetary standard" (p. 105; *cf.* Reed, pp. 52 *f.*, 490 *f.*), and the peculiarities of the various monetary standards that have existed historically (pp. 105 *ff.*; *cf.* Reed, 51 *ff.*, 106 *ff.*).

---

to strengthening the capital structures of banks to a desire to "avoid carrying deflation too far"; (4) pp. 267, 274, 355, 410, on the relation of the technical prescriptions of the Federal Reserve act with respect to the issue of Federal Reserve notes, prior to the passage of the Glass-Steagall act, to the unwillingness of the Federal Reserve authorities to inaugurate measures designed to halt the restrictive policies of member banks in the early years of the depressed 1930's; (5) pp. 311 *f.*, on the relation of "the precept that . . . member banks should not engage in permanent borrowing" (*cf.* pp. 268 *f.*) to the effect of gold inflow upon the process of member bank expansion in the United States; and (6) the general remarks, pp. 469 *ff.*, on the relation of "the *structure* of the [banking] system" to the fact that "there have been many instances in which efforts of the monetary authorities to expand or contract the currency have been thwarted by contrary practices of [member] banks," given the prior fact that it is "our *banking* system" that "provides the greater part of our media of payment."

6. The institutional arrangements for "guaranteeing" the "identity of value" of a given metal when used as a "medium of exchange," on the one hand, and when used "for industrial purposes," on the other (pp. 26, 105 *ff.*; *cf.* Reed, pp. 51 *ff.*).

7. The institutional arrangements for the proper "management" of "token money" (pp. 27 *f.*; *cf.* Reed, pp. 18 *ff.*, 22, 24, 114).

8. The mechanism of changes in the supply of metallic money, under the institutional arrangement of a price for the money metal "fixed by legal authority" and changes in the cost of production of that metal (pp. 46, 107; *cf.* Reed, pp. 385 *ff.*, 393).

9. The mechanics of bimetallism, including the "law of compensatory action" (pp. 108 *ff.*; *cf.* Reed, pp. 57 *f.*, 106 *ff.*).

10. The implications, for analysis and policy, of the institutional fact of "the overwhelming quantitative importance of what we have called deposit money (or check book money)" (pp. 34 *ff.*; *cf.* Reed, pp. 7, 11, 13 *f.*, 47 *f.*, 50, 230 *ff.*, 384 *f.*, 469).

11. The mechanism of the "creation" of "deposit money" (pp. 36 *ff.*; *cf.* Reed, pp. 30 *ff.*, 165 *ff.*), including the influence of the institutional fact of *clearings* on the possibilities of expansion open to a single bank within a banking system, on the one hand, and a single bank in isolation or the banking system as a whole, on the other (pp. 41 *ff.*, 63; *cf.* Reed, pp. 35 *ff.*, 165 *ff.*).

12. The institutional, as well as the purely logical, basis for regarding "time or savings deposits" in banks as part of the quantity of "money" (pp. 33, 69; *cf.* Reed, pp. 146 *f.*, 169 *ff.*, 501 *f.*).

13. The relation between the amount of bank reserves required and the time-structure of the community's probable demand for funds, as well as the "nature of the bank's operations" and the "structure of the whole banking system" (pp. 35, 44 *f.*; *cf.* Reed, pp. 182 *f.*).

14. The economic significance of *legal* reserve requirements (pp. 45, 56; *cf.* Reed, pp. 79, 246 *ff.*, 264 *ff.*).

15. The economic consequences of the institutional practice of *fractional* reserve requirements, and the implications of "100 percent money" (pp. 56 *ff.*; *cf.* Reed, 34, 425 *ff.*).

16. The institutional argument that the "increase [resulting from a rise in the rediscount rate] in the cost of procuring additional deposits with the central bank need not be prohibitive for institutions which have, between them, the power of multiple credit expansion," since "multiple credit expansion" means "multiple interest revenue" (pp. 58 *f.*; *cf.* Reed, p. 39).

17. The dependence of "the rôle played by rediscount policy" upon the "historical development and institutional arrangements in the different countries" (p. 59; *cf.* Reed, pp. 162, 252 *ff.*).

18. The relation established between "common money" and "claims on common money" by the structural and legal factors affecting the degree of control by the central bank over member bank reserves (pp. 29 *ff.*, 34 *ff.*, 57 *ff.*, 62 *ff.*; *cf.* Reed, 228 *ff.*, 254 *ff.*, 276 *ff.*).

19. The effect, on this relation, of institutional and structural factors affecting

the internal drain (pp. 43 *f.*, 64, 257; *cf.* Reed, pp. 280, 285 *ff.*, 353, 357).

20. The significance of, and the limitations upon, open market operations by central banks (pp. 59 *ff.*; *cf.* Reed, pp. 252 *ff.*, 268 *ff.*).

21. The significance, for central bank policy, of structural relations between the short- and long-term loan markets, on the one hand, and the commodity and the security markets on the other (pp. 61, 228 *ff.*; *cf.* Reed, pp. 325 *ff.*).

22. The relation of institutions and the facts of banking structure to the general theory of "liquidity" (pp. 227, 233 *ff.*; *cf.* Reed, pp. 177 *ff.*, 191 *ff.*).

23. The importance of the institutions of "the stock market and of stock speculation"—an importance, according to Professor Halm himself, which "can hardly be overestimated" for both the theory of interest and the channeling of investment funds (pp. 228 *ff.*; *cf.* Reed, pp. 327 *f.*, 330 *ff.*, 347 *f.*).

24. The mechanism of foreign-exchange rate determination and of international payments under various types of monetary standard (pp. 133 *ff.*; *cf.* Reed, pp. 61 *ff.*, 71 *ff.*), including the theory of the external drain (pp. 136 *ff.*; *cf.* Reed, pp. 79 *ff.*, 92, 314, 325 *ff.*, 343 *ff.*, 456).

25. The possibility of reconciling a policy aiming at stability in internal prices and production with a policy aiming at stability in foreign exchange rates, in the face of institutional obstacles to price flexibility and governmental efforts to combat unemployment (pp. 139 *ff.*, 154 *ff.*; *cf.* Reed, pp. 318 *ff.*, 335, 345 *f.*, 395, 455 *ff.*).

26. The disequilibrating, as well as the equilibrating, effects of international capital movements (pp. 140 *f.*; *cf.* Reed, p. 87), and of flexible exchange rates and foreign exchange controls (pp. 142 *ff.*, 153 *ff.*; *cf.* Reed, pp. 80 *f.*, 86 *ff.*, 115, 121 *f.*, 134 *f.*, 301, 335 *ff.*).

27. The rôle of government with respect to tariffs in the mechanism of international debt payment, and its rôle in the establishment and manipulation of foreign exchange controls, including, under the latter head, exchange stabilization funds (pp. 153 *ff.*; *cf.* Reed, pp. 87, 301, 333).

28. The *modus operandi* of exchange stabilization funds (pp. 167 *ff.*; *cf.* Reed, pp. 338 *ff.*).

29. The future of the legal and institutional framework of the international gold standard, in the light of these considerations (pp. 159 *ff.*; *cf.* Reed, pp. 455 *ff.*).

30. The dependence of the choice between devaluation and an attempt to maintain the former parity upon the quantitative importance of contractual elements, such as the size of the country's foreign debt, and the international financial structure (p. 170; *cf.* Reed, pp. 315 *ff.*).

31. The rôle of institutional and contractual elements in determining the degree of "maldistribution of income, so characteristic of hyperinflation and its aftermath" as well as of less extreme inflation and deflation (pp. 77, 127, 261; *cf.* Reed, pp. 294 *f.*, 300 *f.*).

32. The influence of political factors in the choice of particular goals of monetary and banking policy (pp. 120 *f.*; *cf.* Reed, pp. 32 *f.*, 41, 47, 129, 225 *f.*, 240 *ff.*, 356).

It would be a mistake, moreover, and an injustice to Professor Reed, to suppose that the only instances of "overlapping" between the two texts are instances in which Professor Halm's book may be said to "overlap" Professor Reed's book, rather than the other way around. On the contrary, the number of cases in which Professor Reed undertakes to deal with the issues to which Professor Halm devotes his "major emphasis," while it may not be as large as the number of cases in which Professor Halm comments upon the institutional presuppositions of his main argument, is still very large.[4] To the careful reader of both of these texts, therefore, the subject of Money must appear to be something quite different from the oversimplified abstractions or

[4] The very fact that both writers weave their discussion of "institutional" factors into their "purely" theoretical discussion must mean that any list of instances which would not duplicate many of the items in the list given above in the text must seem to understate, particularly in the case of Professor Reed, the number of instances of "overlapping" of the type here indicated. But the following instances may be taken as typical:

1. The theoretical implications of the various "functions" of money. The distinction between money as "money of account" (in the sense both of a *numéraire* and of a standard of deferred payments), on the one hand, and money (or, as Professor Reed would insist, "currency") as "medium of payment," on the other, is particularly stressed by Professor Reed, both as a formal matter and for its importance in understanding monetary processes and policies (chap. 1, and pp. 108, 110, 115, 128, 143, 485 *f.*; *cf.* Halm, pp. 2 *ff.*, 11 *ff.*, 16 *ff.*, 104 *f.*, 118 *f.*, 132 *f.*).

2. The economic meaning and therefore the limitations on the use of index numbers (pp. 145 *f.*, 307 *ff.*, 496 *ff.*; *cf.* Halm, pp. 93 *ff.*, 117 *f.*).

3. The rôle of the rate of interest in the determination of the demand for bank loans and other investment funds (pp. 90, 161 *f.*, 225, 306 *f.*, 328, 439 *f.*; *cf.* Halm, pp. 32, 42, 49 *ff.*, 63, 174 *ff.*, 198 *ff.*, 204 *ff.*, 212 *f.*, 243 *ff.*, 255 *ff.*, 267 *f.*, 295, 298, 311 *f.*).

4. Nonmonetary factors (including those implied by the concept of a "mature economy") affecting the demand for bank and other investment funds and the level of business activity (pp. 220 *f.*, 292, 443 *ff.*; *cf.* Halm, pp. 64 *f.*, 269 *ff.*).

5. The differences, and the relations, between the short- and long-term loan markets (p. 90; *cf.* Halm, pp. 49, 54 *f.*, 61, 237 *ff.*).

6. The general theory of loan-liquidity (pp. 177 *ff.*; *cf.* Halm, pp. 55, 187, 196 *f.*).

7. The theoretical relations between "velocity" and the volume of "trade transactions." (The apparent error involved in Professor Reed's flat statement [p. 499] that when "goods pass through fewer hands in their journey from manufacturers to consumers, ... this reduction of middlemen's activities lowers the volume of currency turnover, and consequently V of the equation of exchange" may be solely a matter of his exposition, from which it is not entirely clear whether he is making the statement on his own account, or is introducing it solely as part of the argument of the correspondent he mentions. *Cf.*, in any case, Halm, pp. 79 *f.*, 83 *f.*).

8. The theoretical implications of various possible criteria for monetary policy (pp. 9, 313, 325, 398 *ff.*; *cf.* Halm, pp. 96 *ff.*, 116 *ff.*, 205 *ff.*, 251).

9. The theoretical relations between internal prices and the foreign exchange rate (pp. 89 *f.*, 103, 121 *ff.*, 136, 154, 296 *f.*, 305 *ff.*, 318 *ff.*, 356; *cf.* Halm, pp. 147 *ff.*), including the effect of currency devaluation on internal prices (pp. 163, 335, 370, *ff.*, 378 *ff.*; *cf.* Halm, pp. 170 *ff.*).

10. The theory of public spending, including its relation to banking policy and the structure of available resources (pp. 441 *ff.*; *cf.* Halm, pp. 87, 312 *ff.*).

11. The theoretical issues involved in the problem of war finance (Reed, pp. 292 *ff.*, 413 *ff.*; *cf.* Halm, pp. 324 *ff.*).

the inchoate mass of technical and historical detail which it must seem to those whose reading has been confined to authors who take a narrower view than either of the two under discussion.

A careful reader, moreover, should have no difficulty in seeing what it is that serves as an organizing principle for the *integration* of material such as the bulk of that to which Professor Halm devotes his "major emphasis" with that to which Professor Reed devotes his. For both authors, undismayed and unterrified by the obloquy heaped upon the "*equation of exchange*" as an organizing device before and since the appearance of Keynes's *Treatise,* have unashamedly accepted it (Halm, pp. 21 *ff.;* Reed, pp. 143 *ff.*) as the best available framework for the presentation of material otherwise so complicated and extensive as to invite not only endless confusion but even positive error.

This feature of Professor Halm's presentation can hardly escape even those who will not go beyond the titles of the chapters immediately following the pages (21-24) on which he describes the purpose of the "equation of exchange."[5] Nor will it escape those more careful readers who will observe the kind of use Professor Halm makes of the framework of the "equation of exchange" in his discussion of particular problems of analysis or policy, even if he does not explicitly reproduce the familiar algebraic symbols in every case (see, for example, pp. 6, 10, 89, 98 *f.*, 123 *f.*, 129 *f.*, 175, 194 *f.*, 197 *f.*, 218 *f.*, 230, 249, 295, 321, 326).

A similar implicit use of the equation as a framework for analysis is to be found in Professor Reed's text (for example, pp. 366 *ff.*, 408 *f.*, 436, 479). But it would be a serious error to suppose from the mere fact that Professor Reed has not chosen, as has Professor Halm, to entitle a series of chapters in such a way as to relate them explicitly to the symbols used in the more common variants of the equation that he has left the reader in doubt as to the relation of his detailed discussion to the framework which he formally accepts. On the contrary (and particularly if one makes use of the algebraic breakdown of M which is presented on p. 31 of the book by Professor Halm, who here follows Fanno, who in turn avowedly based his formulation on that of Fisher), Professor Reed's exposition should leave the reader in not

[5] Chap. 3 is entitled "The Quantity of Money"; chaps. 4 and 5, "Deposit Money" and "Managing the Quantity of Money," respectively; chap. 6, "The Velocity of Circulation of Money"; chap 7, "The Trade Volume"; chap. 8, "Price Levels." Careful readers will note also that chaps. 9 to 12, inclusive, all of which are concerned, in one way or another, with the functioning of different *monetary standards,* are implicitly made part of the discussion of the forces lying beyond the "Quantity of Money" (*cf.* chap. 3 of Professor Halm's text) by the author's statement that "different monetary standards are fundamentally nothing else but different methods of limiting the total *quantity of money*" (p. 103; *cf.* also pp. 105, 116).

the slightest doubt as to where each of his chapters belongs with reference to the variables in his formal framework.[6] This similarity in attitude toward the fundamental framework of monetary theory can be greeted only with the heartiest approval by one who, like the present reviewer, is convinced that the most important single cause of the confusion and misunderstanding and even retrogression which, along with undoubted progress in many directions, has characterized the monetary theory of the last decade has been the failure to recognize the extent to which the recent burgeonings within the field have brought here, as elsewhere in scientific endeavor, "disillusionment as well as elucidation": disillusionment to the extent that we recognize in later elaborations "facts which were long before known and even

[6] It is sufficient to illustrate the point here by reference to the terms M and M' of the equation of exchange. Since Professor Reed, in advancing, against "metallist doctrine," the proposition that "the gold standard is fundamentally a device for restricting the volume of the currency that represents gold" (p. 163) evidences his agreement with the proposition quoted in the preceding note from Professor Halm with respect to "different monetary standards" as "fundamentally nothing else but different methods of limiting the total quantity of money," it follows that M is the subject, not only of Professor Reed's chap. 2, entitled "Our Currency System" (which should be compared with Professor Halm's chap. 3, entitled "The Quantity of Money"), but also of all those chapters (4, 5, 10-12, 26-28, 32-34, 39) in the Reed book which are concerned with the functioning of various monetary standards. The "functioning of various monetary standards" *internationally* is of course one of the things that will affect the "quantity of currency" in any *one* country; and since the "functioning of various monetary standards internationally" is a problem of foreign exchange and international payments, it follows that Professor Reed's chapters devoted to the latter topics (chaps. 7 [to which chap. 6, on "Domestic Exchange," is avowedly presented (*cf.* p. 70) as an introduction], 8, 9, and 29) are likewise to be regarded as part of his discussion of the "quantity of currency." A comparison of the content of Professor Halm's chap. 4, on "Deposit Money," with Professor Reed's chaps. 3 ("How Banks Provide the Payment Media") and 15 ("The Source of Bank Deposit Currency") will reveal that the latter chapters are concerned with nothing if they are not concerned with the factors lying behind the M' of the equation; and the relevance of chaps. 16 ("Local Loans and Mortgages") and 17 ("Outer Market Investments") to the same problem is made perfectly clear by Professor Reed's explicit statement (p. 177) that in both chapters he is concerned with "the processes by which the circulating medium is provided." Similarly, the relevance, to the same problem, of the chapters on member bank *reserves* (chaps. 20, 24, 37) and on the powers of the Federal Reserve authorities to affect those reserves (chaps. 22, 23), as well as on the criteria by which the Federal Reserve authorities should be guided in the use of these powers (chap. 35), should become clear when one observes their relation to the terms *Rtrt* and *rd* of the formula of Professor Halm, based on that of Fanno, to which reference is made in the text, if their relevance is not already clear on the basis of a comparison of their substance with that of Professor Halm's chap. 5, on "Managing the Quantity of Money." And last, but not least, it is not Professor Reed's fault if some readers should remain puzzled as to the relevance, to the M' of the equation of exchange, of Professor Reed's chapters on certain of the factors affecting bank solvency (chaps. 18, 19) and on the problems of banking *structure* (chaps. 21, 22, 30, 31, 40). For, as was pointed out in note 3 above, Professor Reed's own explicit reason for insisting upon these matters is precisely his conviction of their relevance for the magnitude of the "flow of credit" under a set of institutional arrangements whereby it is "our *banking system*" that provides "the greater part of our *media of payment*."

instinctively perceived, our present recognition being simply more distinct and more definite; and elucidation, in that it enables us to see everywhere throughout the most complicated relations the same simple facts."

It should be apparent, from the general tone of this review thus far, that the reviewer believes that both Professor Reed and Professor Halm have acquitted themselves with high credit of the respective tasks which each has set himself. This is not to say that the reviewer is prepared to agree with everything that each of them has to say. On the contrary, there is a very considerable number of passages in each book to which he would take marked exception—indeed, in some cases, violent exception. Yet when all the demerits (if they are in fact demerits) are catalogued, the fact remains that in each case the book represents the generally successful accomplishment of a job well worth doing. In the case of Professor Reed, for example, the very fact that a reader can find so much to challenge him to respectful dissent in a treatment of issues so generally regarded as closed is itself a tribute to the freshness of treatment which has resulted from the author's obvious determination to think through again a whole series of familiar (but perennially recurring) problems. And Professor Halm would deserve the thanks of teachers, if on no other ground, for the very effort to provide a textbook which, along with texts such as L. V. Chandler's excellent *Introduction to Monetary Theory,* belongs to the very small number of those attempting, and attaining a reasonable degree of success in the attempt, to "summarize the present state of the debate in monetary theory" (p. vii), as that debate has developed since the publication, in 1929, of the second edition of D. H. Robertson's classic little text on *Money*.

II

It is, therefore, in no hypercritical spirit that one ventures to suggest that, for all the undoubted merits of these two texts, there is still room for other textbook attempts to carry further the task to which both writers, building on the work of their predecessors, have undertaken with such generally excellent results. That task, according to the explicit statement of both authors, is the task of further *integration* of material, all of it properly to be subsumed under the head of "monetary theory," which has not always been sufficiently integrated in the past. In the case of Professor Reed, as we have seen, what is attempted is the integration of the study of institutionally conditioned mechanisms and processes into a broad analytical system of money- and goods-flows, of the kind indicated by a proper understanding of the implications of those "stream equations" of which the "equation of

exchange" is the prototype. And in the case of Professor Halm, what is attempted is a restatement of the results obtained by "recent efforts" toward "integrating monetary and *general* economic theory" (p. vii) in such a way as to show their relevance for the further elaboration of such an analytical system of money- and goods-flows. What follows represents only a few examples of the way in which this work of "integration" can be carried further at the textbook level.

In the first place, there is the matter of further "integration" *within the field of "monetary theory" itself* (in a narrower sense of the term "monetary theory"). It is, to be sure, gratifying to see the "cash balance approach" treated by both Professor Reed (pp. 154 *f.*, 159 *ff.*) and Professor Halm (pp. 67 *ff.*, 80 *ff.*, 194, 218 *f.*) in terms that represent the very antithesis of the kind of treatment (such as that by Cannan, for example), which suggested that an unbridgeable gap existed between analysis of the forces determining the size of cash balances held relative to outlay, on the one hand, and analysis in terms of Fisherine "velocity," on the other. It is still more gratifying to observe Professor Halm's attempt (pp. 74 *ff.*, 202) to relate the concept of "liquidity preference" to the "cash balance approach" (and therefore to "velocity"), even if there are aspects of this attempt which could be improved upon from the standpoint of both articulation and precision. Yet neither writer, in the opinion of this reviewer, succeeds entirely in integrating into his formal framework those aspects of the so-called "*income* approach" which are concerned, not with the irrelevancies upon which Professor Halm touches briefly on pages 14 and 15 of his text, but with those realistic problems of mechanism and sequence that are involved in the study of the *generation and utilization of money income*.

In the case of Professor Reed, for example, one foresees some bitter struggles on the part of students to understand the precise relation to his own formal framework of his summary (pp. 447 *ff.*) of the so-called "Keynesian" and related theories of the generation and utilization of income: particularly since Professor Reed himself, who elsewhere (p. 158) recognizes that "money incomes . . . are influenced by the volume of currency in circulation and its rate of turnover," does not here provide even the link (itself one of considerable crudity) which is provided by the concept of "income velocity." Professor Halm, to be sure, does provide that crude link (pp. 77 *ff.*, 194); and he even undertakes (pp. 275 *ff.*) to relate it to the concept of the "multiplier" (or, more accurately, to *one* of the concepts of the "multiplier"). But his discussion of the concept of "income velocity" itself includes an attempt to relate it to the "cash balance approach" (pp. 81 *f.*) in a way that reflects too literal an acceptance of the less fortunate aspects of

the "Cambridge" treatment of this particular problem; and Professor Halm's discussion of the relation of "income velocity" to "the multiplier," while it is certainly superior to much that has been written on the subject, seems to this reviewer to be capable of improvements at more than one point.

The nature of these possible improvements should be clear to those who will be as much struck as was the present reviewer by the fact that nowhere in either Professor Halm's or Professor Reed's discussion of the problem of the generation and utilization of money income is explicit reference made to the work on this problem by R. G. Hawtrey.[7] For it is the reviewer's considered opinion that no part of the work of this most original (and still inadequately appreciated) spirit in contemporary monetary theory surpasses, or even equals, in constructive importance his work on the generation and utilization of money income. Not least of its merits (since we are here speaking of "integration" within the field of "monetary theory," in a narrower sense of the term) is the masterly way in which Hawtrey's treatment of the problem succeeded in integrating so many of the relevant analytical devices of monetary theory, as well as so much that had been done previously on the problem of the generation of money income. But it is no mini-

[7] It is particularly striking, for example (though it is also typical of current tendencies in the evaluation of the contributions of Mr. Hawtrey), that on the one occasion on which Professor Halm refers to the "different circulations" into which the total stock of cash balances may be said to be divided (p. 68), he refers to the Keynes of the *Treatise*, rather than to Hawtrey, despite the fact that Hawtrey's distinction between "consumers' balances" and "traders' balances," though it had predecessors in the respective treatments of Adam Smith, Tooke, Wagner, and Walras, acquired, in Hawtrey's own hands, a power and significance far greater than it had had in the hands of any earlier writer. It is equally striking that Professor Halm discusses the distinction in a context which makes no explicit reference to its importance for the study of the processes involved in the generation and utilization of money income. Similarly, when Professor Halm makes the otherwise welcome distinction (p. 78) between "income" and "sales proceeds" (*cf.* also pp. 91 *f.*, on the significance of "intermediate business transactions" as contrasted with "expenditures of net-income"), he makes no formal attempt to relate this distinction either to his distinction between the different types of cash balance (the "different circulations"), or to the Hawtreyan distinction between "consumers' income" (and outlay) and "traders' turnover." And finally, a careful consideration of Hawtrey's criticism (as in his *Capital and Employment*) of the identification by Keynes (and others) of what Professor Halm himself calls "the money value of annual output" with what Professor Halm calls "the annual money income of the economy" might not only have provided Professor Halm with further arguments for his rejection (pp. 91 *f.*) of this identification, but might also have made him somewhat more critical of his own simultaneous definition (p. 78), in the "income equation" $MV_y = P_yT_y$, of T_y as the "real national income per annum" and V_y as "the average number of times a unit of money *enters* (*or leaves*) the *cash balances of ultimate income recipients* during a certain period, say a year"; just as other aspects of Hawtrey's treatment might have made him more critical of his own simultaneous definition of "investment" as "the use of the means of production for the production of capital goods" (p. 189) and his statement that "the process of investing *consists in spending money*" (p. 221).

mization of the merits of the Hawtreyan treatment to suggest that it still left room, on the side both of analysis and algebraic formulation, for further "integration." It is precisely this further "integration"—which involves, in particular, the introduction of both clock-time period and "directional" subscripts into a series of "stream" equations of the general Fisherine form—that would show more clearly than is shown in either of the texts under review the relation of analysis such as the Hawtreyan not only to the "period analysis" to which both Professor Halm (pp. 204, 216, 276 *ff.*) and Professor Reed (pp. 148 *f.*, 447 *ff.*) make incidental reference, but also to the formal framework, represented by a "total transactions" equation of exchange, to which both authors acknowledge formal allegiance.

A further set of examples of the possibility of further "integration," even at the textbook level, is provided within the field to which Professor Halm, to judge by the implications of his Preface, undertakes to give particular attention: namely, that involving the further "integration" of "monetary" theory with certain sectors in "general" economic theory. It is to Professor Halm's credit that (with the possible exception of his reference on pages 14 and 15, already cited, to certain aspects of the so-called " 'Income Theory' of the value of money") he has generally avoided much of the bog of irrelevancies which has encumbered discussion of this problem in the past. It is still more to his credit that he has bravely attempted to introduce, at the textbook level, a discussion (pp. 48, 70 *f.*, 75, 255 *f.*, 300 *f.*, 305 *f.*, and especially chaps. 13 to 15, inclusive) of the monetary forces involved in the determination of the *rate of interest:* a discussion which should do much, not only to make clear the relevance for this problem of so much that has often been regarded in the past as beneath the notice of "general" economic theorists and suited only for the attention of sordid specialists in the field of "monetary theory," but also to make clear (*pace* the Keynesians) the continuing relevance of a considerable part of the theory of interest as developed in the literature on "general" economic theory. If, therefore, one ventures to suggest that the work of "integration" upon which Professor Halm rightly puts so much stress can be carried still further in significant and fruitful ways, this can hardly be regarded as an attempt to minimize the qualities of these parts of Professor Halm's text, which, despite a few lapses, are generally excellent.[8]

[8] One of these "lapses," in this reviewer's opinion, is represented by Professor Halm's none too happy references (pp. 181 *ff.*) to the relation of "waiting" to "full employment"; for the passages in question would seem to involve the arbitrary identification of "waiting" with a *reduction* of consumption, instead of its identification merely with a refraining from consuming the whole of one's income (contrast Professor Halm's own use of the term "saving" on pp. 263 and 299). Another of these "lapses" is represented by some characterizations by Professor Halm (pp. 197 *f.*, 214) of the substance of "classical"

With respect to the rate of interest, for example, there is no explicit suggestion, in Professor Halm's treatment, of the way in which a description of the *market determination* of the rate of interest can be easily incorporated into the general system of money flows of which a "total transactions" equation of the Fisherine type is a final summary. This is the more striking in view of the fact that Professor Halm himself makes use of one of the important steps in this description: namely, the simple translation of the "supply of and demand for loanable funds" —a concept that rightly occupies the central place in Professor Halm's treatment (pp. 9, 48, 183 *f.*, and especially chaps 14 and 15)—into the demand for and supply of "claims" (pp. 225 *ff.*), or securities that, according to Professor Halm himself elsewhere in his book (pp. 85, 90), are to be included in his *T*. For the further steps required ought to have followed logically from a consideration of the implications of the argument, by writers from Tooke to Hawtrey, with respect to the treatment of "securities" in a "money-flow" formulation; and the importance of these further steps follows from the fact that they enable one to see, with a clarity greater than that to be found even in Professor Halm's generally excellent treatment, the proper rôle to be assigned to the "demand for *money*" (including some of the connotations of the expression "liquidity preference") in the determination of the rate of interest (*cf.* Halm, pp. 202, 220 *ff.*), as well as the rôle to be assigned to "savings" which take the form of a change in the *direction* of money flows, *without* any necessary change in the demand for or supply of "money" (*cf.* Halm, pp. 197 *f.*).

The really impressive possibilities for further "integration" come, however, when one considers the full implications of Professor Halm's statement that "monetary problems can no longer be treated as being separate from the problems of *prices* and *production*" (p. vii). These implications carry one much further than the absurdly jejune suggestions of those who, themselves made belatedly aware of the possible effects of changes in the dimensions of aggregate money flows upon the level of output and employment, and unwilling to follow the example of both Professor Reed (pp. 150, 152 *f.*, 158) and Professor Halm (pp. vii, 20, 22 *f.*) in distinguishing sharply between the implications of "the quantity theory" and the implications properly attached to "stream" equations of the Fisherine type, have presumed to charge all users of these equations with an unawareness of the fact that the *output* and *employment* components of *T* are not necessarily constant. Since both of the authors of the texts under review are unrepentant users of the Fisherine equation as their formal framework, a sufficient answer to this absurd

doctrine on the relation of money to the rate of interest which seem to this reviewer to be anything but accurate.

charge is provided by the continued concern of Professor Halm (pp. vii, 8, 47 *f.*, 85 *ff.*, 116 *f.*, 131, 173, 190 *ff.*, and chaps. 17 to 20, inclusive) with the problem of the effect of monetary expansion and contraction upon the level of output and employment, as well as the incidental references to this crucial problem by Professor Reed (pp. 90, 155 *f.*, 161, 220, 225, 348, 414, 424). An even better answer is provided by (1) considering what both Professor Halm (pp. 6 *f.*, 9, 17 *ff.*, 23, 48, 88 *ff.*, 93 *ff.*, 118 *ff.*, 123 *ff.*) and Professor Reed (pp. 301, 303, 326 *f.*, 394, 396 *ff.*) have to say with respect to the importance of the *structure* of *prices* (as well as the structure of output and available resources; *cf.* Halm, pp. 87 *ff.*, 129, 190 *f.*, 257 *ff.*, 299 *ff.*, 309 *ff.*) for precisely these changes in aggregate output and employment; and then (2) comparing discussion of this kind with the little, if anything (*cf.* the example cited on p. 310 n., of Professor Halm's text), that the Keynes of the *General Theory* (as opposed to the Keynes of the *Treatise*) has to say on the same subject.

But, vitally important as implications of this kind are in themselves, they really do little (again *pace* the Keynesians) to further the task of "integrating monetary and *general* economic theory." For, despite the absurd statements commonly made to the contrary, important contributions to the theory of the effect of monetary expansion and contraction upon aggregate output and the *structure* of output (the latter, again, being itself crucial for an understanding of the reasons for fluctuations in aggregate output) have for generations been made by writers who neither claimed to have accomplished, nor in fact succeeded in accomplishing, any significant "integration" as between the two bodies of theory.

When one thinks of "general" economic theory, one thinks of the two great bodies of "partial equilibrium analysis," on the one hand, of which the work of Cournot and Marshall stands as an imperishable monument and symbol, and, on the other, of "general equilibrium (or, much better, general *interdependence*) analysis," of which the work of Walras, equally imperishable, stands as a symbol that is at once countervailing and complementary. It would be entirely unfair to Professor Halm, in particular, to suggest that he nowhere evidences an awareness of the way in which each body of analysis is to be incorporated into a generalized description of the "money economy" in terms of an interconnected system of money flows.[9] But it is not unfair

[9] The implications of "*partial* equilibrium analysis," for example, are to be found in Professor Halm's reference to the substance of the analysis represented by particular demand schedules" (pp. 5, 89), even if he does not explicitly use the *term* "demand schedules" or refer explicitly to their property of "elasticity" (the only explicit uses of the term "elasticity of demand" appear in a discussion of certain aspects of the concept of "neutral money" [p. 127, n. 12] and in a discussion of the elasticity of demand "for the

to suggest that the ordinary student will hardly derive from a perusal of the relevant passages a clear understanding of the precise way in which the tools of ***partial*** equilibrium analysis in particular—demand curves, supply and cost curves, elasticities of demand and supply—are to be related to that system of realized flows of money and of objects sold for money of which, again, a "total transactions equation" of the Fisherine type is a final summary.[10] Yet the simple analytical devices required to establish this crucial relation are to be found, dramatically enough, in the writings of Cournot and Walras—the two great symbols of "particular equilibrium" and "general interdependence" analysis, respectively.[11] This reviewer is prepared to insist, upon

---

products of the paying country" as a factor involved in the international "transfer problem" [p. 151]). The implications of "partial equilibrium analysis" appear also in Professor Halm's reference to supply and output curves (*cf.* especially pp. 85 *f.*, where the *term* "supply curves" is explicitly used), even if, again, no explicit use is made of the term "*elasticity* of supply." (The same comment applies to Professor Reed, who, however, unlike Professor Halm, does not refer explicitly to "supply *curves*." *Cf.*, for example, p. 161 of Professor Reed's text.) The implications of "general interdependence" analysis of the Walrasian type are to be found not only in references to the general phenomena of complementarity and substitution (Halm, p. 4; *cf.* also p. 4 of Professor Reed's text), but also, and much more importantly, in references to what amounts to the Walrasian picture of a "circular flow" (Halm, pp. 5 *ff.*).

[10] One of the reasons for such a student's difficulties, it may be suggested, will probably be traceable to the fact that, despite Professor Halm's simultaneous acceptance, commented upon above, of the importance of studying the price *structure,* and of the equation of exchange as an analytical tool, his exposition is hardly such as to make unequivocally clear to the student that an adequate appreciation of the implications of "***the*** equation of exchange" requires an understanding of the relation of a "total transactions equation" to a "*system* of money flows"—that is, to a ***system*** of "partial" stream equations. The nearest approach to a mention of these possibilities, indeed, is represented by Professor Halm's use, on pp. 77 *ff.* (*cf.* also pp. 91 *f.*) of a "stream" equation of the "income" type, along with one of the "total transactions" type. *Cf.* especially, in this connection, p. 23 of Professor Halm's book, where, having argued, quite correctly, that "it is only through many single price-making processes that the monetary factors can influence the economy," he goes on to advance the misleading proposition that "the equation of exchange is incapable of expressing the changes in the structure of *relative* prices caused by monetary factors."

[11] The first of these analytical devices, found in both Cournot and Walras, establishes the relation between a particular demand (or supply) schedule and a realized act of money expenditure through expressions of the type $D = pq = p\,F(p)$, in which D represents the realized "effective ["monetary"] demand" of "monetary" theory for a particular commodity (*cf.* Halm, pp. 6 *f.*, 19), and $F(p)$ involves the concept of "market demand" (or "market supply") as it appears in the familiar demand (or supply) schedules of "general" economic theory: that is, as "the amount of any given good which buyers [or sellers] stand ready to purchase [or sell] at a particular price" (*cf.* Halm, pp. 5 and 89). The second group of devices, the implications of which are likewise to be found in both Cournot and Walras, establishes the relation between these discrete acts of money expenditure and the *flow* of money expenditure ***in time***. It is to be noted that Professor Halm, in repeating (p. 174) the familiar proposition that "prices, as explained in static economic theory, refer to a point of time," repeats it, as do the authors he quotes, in a context (namely, that of the relation of ***interest*** theory to the general theory of prices)

the basis of his own experience, that these analytical devices can be taught to "ordinary" undergraduates at a frankly textbook level with rather greater ease than is likely to be the case with much of the material which Professor Halm has incorporated into his excellent text.

To implied "criticism" of this kind (though the reviewer, in all sincerity, does not intend it to be regarded as "criticism," which should ask first of all how well a given author has performed the particular task *which he set himself*), both Professor Halm and Professor Reed should have a ready answer: "If you think you can do a better job on the thing you want to do than we have done on the things we wanted to do, go ahead and try." This would be not only a ready answer; it would also be a fair answer. Any colleagues of Professors Reed and Halm who choose to take up the challenge will find their work cut out for them.

---

in which it is of very doubtful relevance in itself; whereas, like these other authors, Professor Halm makes no mention, at this point, of the relevance of the Walrasian concept of a "*circular flow*" for the establishment of the relation between (1) the discrete pricing situations dealt with by the weapons of "partial equilibrium" analysis, on the one hand, and, on the other, (2) both the concepts of realized interdependence *in time* and the further analytical weapons at our disposal (including so-called "period analysis") for the tracing of time-processes in addition to those processes characteristic of a "system" "in equilibrium."

THE THEORY OF THE FIRM IN THE LAST TEN YEARS

By Kenneth E. Boulding

It is probable that when future historians of economic thought look back over this century, the thirties will appear as an era of rapid development in economic theory. Not only has there been unusual activity in monetary theory, but extensive transformations have also been made in the basic theory of value. The outstanding publications in this field are, of course, Joan Robinson's *Theory of Imperfect Competition* and Chamberlin's *Theory of Monopolistic Competition,* the first produced in Cambridge, England, and the second in Cambridge, Massachusetts. These volumes mark the explicit recognition of the theory of the firm as an integral division of economic analysis upon which rests the whole fabric of equilibrium theory. General equilibrium is nothing more than the problem of the interaction of individual economic organisms, under various conditions and assumptions; as a necessary preliminary to its solution, an adequate theory of the individual organism itself is necessary. This consists of two main parts: first, an account of the circumstance, or environment, facing an economic organism, described in individual demand curves, purchase curves, expectations, and so on, together with a "principle of maximization," a criterion by which to judge the various possible actions of the organism in order to select the "best." Second, from the principles discovered in the first part of the theory, a technique must be devised to describe the *reactions* of an organism to changes in its environment: how, for instance, a change in the demand for its product will affect its sales.

The "Cambridge Theory"—if so we may describe the essentially similar[1] doctrines of Mrs. Robinson and Professor Chamberlin—made one important step forward in the techniques of analysis, *i.e.,* the use of

Editor's Note: The author, formerly at Colgate University and the Institute for Advanced Studies, Princeton, is now professor of economics at Fisk University, Nashville.

[1] Probably neither Mrs. Robinson nor Professor Chamberlin would agree that their doctrines are essentially similar: indeed, in regard to the theory of the "industry" and of general equilibrium there are significant divergences between them. In respect to their theory of the firm *per se,* however, there is little difference between them. Compare Kaldor, "Market Imperfection and Excess Capacity," *Economica* (1935), p. 33: Joan Robinson, "What Is Perfect Competition?" *Quart. Jour. of Econ.* (1934-35), p. 104: E. H. Chamberlin, "Monopolistic or Imperfect Competition," *Quart. Jour. of Econ.* (1936-37), p. 557.

the marginal revenue curve, and one very important advance in generality in showing clearly that the theory of the firm under perfect competition was merely a special case of the theory of the firm under monopoly, worked out long before but without very fruitful techniques, by Cournot and Marshall. The Cambridge Theory has been of great importance in simplifying the exposition of economic theory, and it is in the field of elementary exposition that these doctrines have been of most value. Comparing the lucidity of Meyer's *Elements of Modern Economics,* for instance, with any text published in the pre-marginal revenue era will illustrate the point. The student of today, if he is inclined to crab at the geometry with which he is usually presented in his elementary course, should take a look at Marshall's fearsome "nests of rectangular hyperbola" or at Cournot's even more repulsive calculus, and thank his stars that he was not born ten years earlier.

Nevertheless, for all the importance of this contribution, neither Professor Chamberlin nor Mrs. Robinson added very much to the theory of the firm itself, as outlined by Cournot or by Marshall in his chapter on monopoly. Cournot's assumptions are unchanged: that the total cost and total revenue vary continuously with output, and that the "best" position of the firm is that in which the net revenue, the difference between total revenue and total cost, is a maximum. The "marginal cost equals marginal revenue" condition, on the one hand, and the analogous "marginal value productivity equals price of factor" condition, on the other, are both merely convenient expressions of the maximization of net revenue. The firm is conceived either as an organism receiving a constant flow of revenue, and disbursing a constant flow of costs, or as an instantaneous enterprise conceived and liquidated within so short a period of time as to make the cost and revenue items virtually simultaneous.

The weakness of this Cambridge Theory was that it completely neglected the time element in enterprise, and consequently worked with a concept of the firm so far from reality that it cannot be considered more than a rough—though useful—first approximation. It was therefore forced to abstract from an essential feature of enterprise—uncertainty; it made no contribution to capital theory, and it invariably broke down when any attempt was made to account for *profits.* Because of its lack of dynamic character, it also failed to give any satisfactory account of interfirm relationships, for instance, in duopoly, where anticipations form an essential part of the data and where the position of equilibrium is determined by the *path in time* which is taken in reaching it.

Most of the work of the past ten years has been directed toward

building up a more accurate picture of the nature and reactions of a firm, particularly expressed in explicit time relationships. We now conceive the firm not as the recipient of a continuous flow of revenues and costs, but as an *account,* consisting of a large number of different input and output items, each with a specific date attached, and strung out in time like washing on a line. Under these circumstances we can no longer assume that the net revenue is to be maximized, for the entrepreneur might prefer a smaller net revenue that accrued earlier to a larger net revenue that accrued later.[2] The problem, "What does the entrepeneur maximize?" therefore, becomes an acute one.

Most of the writers[3] who have tackled this question assume that the entrepreneur wishes to maximize the *discounted* net revenue of his enterprise; *i.e.,* the difference between the present value of all future receipts and the present value of all future outlays. The discounting presumably is to be done for each period of time at that rate of interest which represents the alternative cost of employing capital in the occupation in question; that is, at the rate which the entrepreneur could obtain in other investments. This assumption is implicit, of course, in Taussig's *Wages and Capital,* as in any theory equating the price of a factor of production to its *discounted* marginal product. The conditions of maximization, corresponding to the "marginal cost equals marginal revenue" condition of the Cambridge Theory, are that for each variable the *discounted* marginal cost must be equal to the *discounted* marginal revenue. The "discounted marginal product" theory of wages is of course a special case of the above condition of maximization. It should be noticed that this refinement of the Cambridge Theory is not as revolutionary as might at first sight appear. Indeed, if we define marginal cost to mean the increase in total cost which results from a unit change in output, and define total cost (as we must) to include interest and "normal profit" charges, the marginal cost is seen to be the same as the "compounded marginal outlays"; *i.e.,* the sum of previous outlays, plus interest and profit accruals. If, then, the revenues are assumed to occur at a single date, the Cambridge criterion and the "discounted net receipts" criterion give the same result. This is generally true if the time relationships of the various inputs and outputs are not variable, as in many instances is the case. If the time relationship between input

[2] This fact would seem to vitiate Gerhard Tintner's otherwise interesting article on "Monopoly Over Time" in *Econometrica,* Vol. 5 (1937), pp. 160-70.

[3] H. Hotelling, "The Economics of Exhaustible Resources," *Jour. of Pol. Econ.* (April, 1931); Dr. J. R. Hicks, in "Wages and Interest, the Dynamic Problem," *Econ. Jour.* (Sept., 1935); also in *Value and Capital* (Oxford, 1939); A. G. Hart, "Anticipations, Business Planning, and the Cycle," *Quart. Jour. of Econ.* (Feb., 1937); P. A. Samuelson, "Some Aspects of the Pure Theory of Capital," *Quart. Jour. of Econ.* (Aug., 1937).

and output is a variable of the problem, as, for instance, in the classic example of the maturing of wines or of the growth of trees, the Cambridge Theory breaks down.

Another suggestion in regard to the maximization problem I made myself:[4] that the entrepreneur should maximize the internal rate of return on his investment, or the "rate of profit" which the investment actually earns. This gives the same criterion of maximization as the "discounted net receipts" formula, with the exception that the rate of interest used in discounting in the first case is the "internal" rate and in the second is the "alternative" rate, or rather scheme of rates, which is regarded as normal. If the economic rent of an enterprise is included as one of its outlays, then even this distinction disappears, for if we discount (or compound) any series of net receipts *including* economic rent at a rate equal to the "alternative rate," the result is the same as if we had discounted (or compounded) the same series—not including economic rent—at the internal rate. The criterion of maximizing the internal rate of return is thus seen to be a special case of the "discounted net receipts" criterion.

The "discounted net receipts" criterion in its turn has not proved altogether satisfactory; for, although it takes into account the time relations of inputs and outputs, it abstracts from the most essential feature of enterprise—its uncertainty. Every decision must be made in the expectation of certain future events, and the expectations, by the very fact that they refer to the future, are uncertain. The problem of relating this uncertainty to the conduct of enterprise is therefore a major one. Indeed, in general theory, "profit" is usually regarded as the reward of "risk-bearing"—or rather, to use Professor Knight's more exact term, "uncertainty-bearing," an uncertainty being an uninsurable risk, and a necessary and characteristic feature of all enterprise.

One method of surmounting this difficulty is to express an expected future magnitude—receipt or expense—not as a single figure but as a probability distribution, showing the probability of each of a series of possible magnitudes for the variable in question. Thus a manufacturer may think that there is a 50 per cent chance of his receipts next month being \$10,000, a 20 per cent chance of their being either \$9,000 or \$11,000, a 4 per cent chance of their being \$8,000, or \$12,000, and so on. This method of expressing the probability of future magnitudes has been used by many authors: Irving Fisher used it as far back as 1906,[5] and it has entered into almost all discussions of the topic in the past ten years. As a first approximation, the "expected value" of the variable

[4] K. E. Boulding, "The Theory of a Single Investment," *Quart. Jour. of Econ.*, Vol. 49, pp. 475-94.

[5] Irving Fisher, *Capital and Interest*, Appendix to chap. XVI.

in question, *i.e.*, the average of all possible values, each weighted by its probability, may be substituted for the probability distribution, and then treated as if it had 100 per cent probability, thus eliminating uncertainty altogether. This procedure, however, is dangerous, for, in effect, it abstracts once more from the fact that differing degrees of uncertainty may involve various choices, and consequently may draw attention away from the most essential questions posed by the existence of uncertainty. Professors Marschak and Makower, in their remarkably interesting article on "Assets, Prices, and Monetary Theory,"[6] offer a suggestion that there are at least three aspects of the probability distribution of a net receipts item to take into account: *lucrativity,* expressed by the expected value of the item; *safety,* measured by the smallness of the dispersion of the probability distribution; and *asymmetry,* measured by the skewness of the distribution, important in the case of "long odds enthusiasts" who are more eager to take a small chance of a large gain rather than a mathematically equivalent large chance of a small gain. These authors suggest also that uncertainty equivalents may be expressed by a process analogous to discounting; that is to say, we should be able to set up a system of preferences of any individual, expressing the equivalence, in terms of "utility" or indifference, of various sums of various dates, degrees of safety, skewness, etc. The process of discounting in the ordinary sense is that of equating in "value" different sums because of their difference of time position. In other words, if the rate of interest is 5 per cent per annum, we say that $100 now is equivalent to $105 in one year's time, because if an individual can earn 5 per cent per annum on his money he does not care whether he has $100 now or $105 next year, provided that his demands do not alter and that the sums in question are absolutely certain. If, however, the sums are not certain, we can still say of a given individual that he does not care whether he has $100 now or, say, the probability of getting various sums next year, the probability distribution having a known expected value, dispersion, and skewness. The $100 this year is then the "discounted equivalent" of the whole probability distribution of next year.

An apparent difficulty of this line of analysis is that it takes away the *objectivity* of the discounting process. As long as we regard the external rate of interest as the controlling factor in the discounting process, it appears to be quite mechanical and objective. If we include the elements of time and uncertainty preference immediately there is a different rate of discounting for each individual, and the objective rate of interest disappears. This, however, is a marked step toward reality; for "the rate of interest" that figures so largely in economic

[6] H. Makower and J. Marshak, *Economica* (1938), pp. 261-88.

discussion is an illusion created by the fact that some future events—*e.g.*, the payment of obligations under a government bond—are so probable that we regard them as absolutely certain. Consequently, the price of these obligations in the market "determines" a rate of interest which is as objective as the fulfilment of the obligations is certain. But in strict theory we must recognize that all future events are uncertain—*i.e.*, have less than 100 per cent probability—and that consequently what is determined in the capital market is not a rate of interest, but the price, or present value, of more or less uncertain future payments. The rate of interest to which each price corresponds is a purely subjective matter, depending on the expectations and on the preferences of the individual concerned. Indeed, these expectations involve preferences so complex that we will probably have to abandon the simple concept of interest as a "rate of time transference," and recognize it for the multidimensional complex that it is.

Mr. Kalecki has developed an interesting special case of these general principles in his "Principle of Increasing Risk."[7] He points out that one of the limitations preventing the indefinite expansion of an enterprise, even under conditions where there are no other limiting conditions, such as imperfect markets or decreasing returns, is the decline in the proportion of the total investment represented by the entrepreneur's own capital, and the corresponding increase in the proportion of borrowed capital. The smaller the proportion of the total investment represented by the entrepreneur's equity, the greater will be the proportionate loss of that equity for a given proportionate loss of the total investment. Thus, if the total investment is $1,000,000, of which $500,000 is the entrepreneur's equity and $500,000 is borrowed, a 10 per cent loss of the total investment represents a 20 per cent loss in the entrepreneur's equity. If, however, the entrepreneur's equity in this case were only $100,000, a 10 per cent loss on the total investment would wipe out the entrepreneur's equity completely. Consequently, the more an enterpreneur borrows in order to expand his business, the greater the risk of loss of his own capital, or the greater the dispersion of the probability distributions of the expected receipts from the entrepreneur's own capital. An entrepreneur will cease to expand at the point where he reckons the gain in "lucrativity" to be just balanced by the loss in "safety," to use the language of Marschak and Makower.

Another interesting approach in the direction of quantifying these relationships is that of Mr. R. H. Coase,[8] who develops an idea of Pareto in showing the most preferred point graphically by means of indifference curves relating income and probability, the assumption

[7] M. Kalecki, *Essays in the Theory of Economic Fluctuations*, pp. 95-106.

[8] R. H. Coase, "Some Notes on Monopoly Price," *Rev. of Econ. Stud.*, Vol. 5, p. 17.

being that an entrepreneur will not care whether he has a large income of low probability or a small income of high probability. This approach by means of indifference curves is worthy of more attention; Mr. Coase does not solve all the problems he raises, and he seems to have the probability curves drawn rather inaccurately, but the idea is a most valuable one and may prove useful in future developments. It has the great merit that it assimilates the theory of the firm still more closely to the theory of the consumer, recognizing that the conduct of enterprise and the conduct of consumption are merely cases of one general principle of choice.

For all these fruitful suggestions, it cannot be said that this chapter in the development of economic thought is closed. Not only do we wait for a method of analysis, perhaps a graphical device like the marginal revenue curve, which will free the theory of uncertainty from its present formality and enable us to reach more conclusions than now seems possible; we also need much more work on the nature of uncertainty and of profit. It can be argued that all argument in terms of probability distributions is concerned only with *risk,* in Professor Knight's terminology, and not with uncertainty at all. If we know the probability of a future event we can insure against it, and hence eliminate the risk altogether. An event is not uncertain unless we know that it does not have 100 per cent probability of occurrence, and we do *not* know the actual probability of occurrence. Thus, there are three degrees of knowledge: certainty, which is 100 per cent probability: risk, which is a known probability; and uncertainty, which is an unknown probability. Enterprise concerns itself largely with the last of these three, and the theory of probability does not seem to have been extended to this case.

The uncertain position of the theory of uncertainty is reflected in the equally unsatisfactory nature of the theory of profits. This lies rather beyond the scope of the theory of the firm, but we may notice that the part played by profits in the various forms of competition is still much open to doubt. One of the most attractive conclusions of the theory of monopolistic competition (to be attributed principally to Chamberlin) is that the end result of monopolistic competition is not to permit profits above normal, but to make the number of firms in an industry larger than would be the case under perfect competition. The monopolistic element works itself out not in permitting higher profits to the marginal firm, but in permitting more firms to make at least normal profits. This conclusion has been attacked by Mr. Kaldor[9] and Mr. Triffin,[10] both of whom really wish to abolish the concept of an

[9] M. N. Kaldor, "Market Imperfection and Excess Capacity," *Economica* (1935), p. 33.
[10] Robert Triffin, *Monopolistic Competition and General Equilibrium Theory* (Harvard, 1940).

BOULDING: THE THEORY OF THE FIRM 799

"industry" altogether on the grounds that it is impossible to fix boundaries between one industry and another. Hence, the concept of a "marginal firm" also seems to disappear, except in perfect competition, the profits of each firm being determined with reference to the possibility of producing substitutes for its product. But this means virtually the abandonment of the theory of imperfect competition. We seem almost to be back at Marshall again, with a fairly clear theory of monopoly, a fairly clear theory of perfect competition, and a twilit region in between where our theory gives us few clear conclusions, and where, unfortunately, most of the economic world resides. All this discussion reflects the generally unsatisfactory state of the theory of profits: even an authority like Professor Hicks finds it an easily exhaustible mine of useful results.[11]

In connection with the theory of uncertainty the study of Dr. Albert G. Hart[12] deserves particular mention, as constituting perhaps the most exhaustive study to date of these aspects of the theory of the film. Dr. Hart lays particular stress on the phenomenon of capital *rationing*—a limiting factor in the expansion of an enterprise of great importance in present circumstances. He also points out the importance of "flexibility" of plan, that is, the element in present decisions which permits of future adjustments. For "flexibility" of assets a firm may sacrifice lucrativity up to a certain point.

The theory of the reactions of a firm naturally lags behind the theory of the principles which govern a firm. Nevertheless, there have been some important contributions in recent years, mostly in the direction of a more realistic account of the *variables* with which a firm is likely to be concerned and of the functional relationships between these variables.

Progress has been made, for instance, in the description of the production function, which expresses the necessary relationships between quantities of input and output. The graphic representation of the production function as a three-dimensional surface, relating the quantities of two inputs and one output, has been valuable in clarifying the nature of input-output relationships. Especially valuable has been the use of contour-lines of this three-dimensional figure or "isoquants," showing on a plane graph whose axes represent quantities of two inputs those combinations of input-quantities which yield a given output. The "isoquants" are at the same time "revenue contours," for any two combinations of inputs which yield the same output will also yield the same

[11] J. S. Hicks, "The Theory of Uncertainty and Profit," *Economica* (May, 1931), p. 170-89.

[12] A. G. Hart, "Anticipations, Uncertainty, and Dynamic Planning," *Jour. of Bus., Univ. Chicago,* spec. suppl.

revenue. On the same figure "cost contours" or "isocosts" can be drawn, showing these combinations of inputs involving the same total expense. The point at which an isoquant is touched by a cost contour represents a "least cost combination" of inputs, or the cheapest way of producing the output given by the isoquant. The locus of all such points has been called the "expansion path" by Carlson, following Frisch.

The effect of a change in price of one input can easily be analyzed by the above tools. If the price of Input A rises, while that of Input B remains the same, the result is to steepen the isocost lines, making them more nearly parallel to the B axis, as a larger amount of B is now equal in total cost to a unit of A. The expansion path is therefore shifted toward the B axis, and the cheaper B is substituted for the more expensive A. This is known as the "substitution effect." There is also a "scale effect"—a contraction in scale necessitated because the rise in the price of input has raised the marginal cost at each output. At the old optimum output the marginal cost is now greater than the marginal revenue. When the price of Input A rises, the substitution effect operates to reduce the purchase of A and increases that of B. The scale effect operates to reduce purchases of both inputs. If the scale effect is great enough it may counterbalance the substitution effect in the case of B and cause a net decline in the purchase of B, even though relative to A its price has risen.

This type of analysis is exactly analogous to the analysis of the reactions of a consumer by means of indifference curves. Indeed, a consumer is merely a "firm" whose product is "utility." The indifference curves are analogous to the isoquants, or product contours, the only difference being that they cannot be assigned definite quantities of utility. The utility surface, whose contours form the system of indifference curves, is a "mountain" whose shape we theoretically know, but whose height at any point probably cannot be known; by contrast, we can assume that both shape and height of the production surface are known. The "substitution effect" and the "scale effect" are likewise known in consumption theory, where the scale effect is usually called the "income effect." Thus, a rise in the price of a single object of consumption will have a substitution effect tending to reduce the consumption of that object as cheaper alternatives are substituted for it. There will also be an "income effect" tending to reduce all consumption, as the higher price makes the consumer poorer. The effect of a given rise in price, therefore—*i.e.*, the elasticity of demand—depends first on the substitutability of the commodity concerned, and, secondly, on its importance in the total expenditure. This is true either of a consumption good or of a factor of production.

This unified theory of production and consumption is itself the prod-

uct of many hands. It was first developed in the theory of consumption: the concept of indifference curves goes back to Pareto,[13] the analysis in terms of substitution and income effects was made, though in a highly mathematical form, by Slutsky,[14] and interpreted by Hicks and Allen[15] in a celebrated article. The applications to the theory of production may be traced back as far as Wicksell, and to Wicksteed, who drew attention to the essential symmetry of the classical law of diminishing returns. The use of isoquants to describe the production function did not develop to any great extent until the thirties. Frisch[16] Schneider,[17] and Hicks[18] make use of them. Carlson[19] uses them extensively, and in my *Economic Analysis*[20] I have extended this type of analysis to cover even the theory of selling cost, relegating the once predominant theory of consumption to its place as a special case of the general theory of an economic organism.

It is not difficult to extend this type of analysis to cover the case of joint products (*cf.* Carlson[21]). What is more important, it can be extended to cover the case of an enterprise in time. The great defect of the Cambridge Theory was that it took no account of the position of inputs and outputs in *time*. With the aid of the "substitution effect" and "income effect" concepts this difficult problem can be tackled. It is merely necessary to assume that time position, as well as kind or quality, separates one factor from another. Thus, "this week's labor" is a different factor from "next week's labor." Once this is recognized, the effects of expectations can be analyzed. Thus, suppose that an entrepreneur expects that labor will be cheaper next year. This expectation will have two general effects: first, next year's labor will be substituted in some degree, not only for other factors of next year, but also for this year's labor: *i.e.*, the purchase of labor will be postponed. Secondly, there may be a scale effect—in this case a general increase in scale —which will further tend to expand the purchases of next year's labor. In regard to the purchases of this year's labor, however, the substitution and the scale effects would be in opposite directions, the substitution

[13] V. Pareto, *Manuale di Economia Politica*, cap. III, sect. 54.

[14] E. Slutsky, "Sulla teoria del bilancio del consumatore," *Giornale di Economisti* (July, 1915).

[15] J. R. Hicks and R. D. G. Allen, "A Reconsideration of the Theory of Value," *Economica* (1934).

[16] R. Frisch, "Tekniske og Økonomiske Producktivitetlover" (mimeograph lectures, Oslo University).

[17] E. Schneider, *Theorie der Produktion* (1934), p. 4.

[18] J. R. Hicks, *Value and Capital* (1939), p. 91.

[19] S. Carlson, *A Study in the Pure Theory of Production* (1939), p. 19.

[20] K. E. Boulding, *Economic Analysis* (1941), chaps. 23 and 26.

[21] Carlson, *op. cit.*, chap. 5.

effect tending to diminish, the scale effect tending to augment the purchases. The net effect will depend on their relative magnitudes: if next year's labor can easily be substituted for this year's labor, that is, if the purchase of labor can easily be postponed, the result of an anticipated fall in wages will probably be a decline in present employment. If, however, this year's and next year's labor are not easily substitutable, and if the scale effect is considerable, the expansion of scale may begin this year and the expectation of a fall in wages will cause a rise in this year's employment.[22]

Closely related to the theory of the individual firm is the theory of duopoly, or oligopoly—*i.e.*, the theory of the interactions of two or more firms operating under the condition that each firm in drawing up its own policy considers in some way the reactions of other firms, and the consequent repercussions on itself of any policy it may pursue. The theory resolves itself into a comparative study of the results obtained when various assumptions are made regarding the expectations of the two firms and the nature of the repercussions. The theory in one form is as old as Cournot; Chamberlin[23] and Stackelberg[24] have given more general treatments. No very far-reaching developments seem to have been made in this part of theory in the last few years, though the work of Smithies and Savage[25] is worth mention as providing a dynamic approach in terms of the path to equilibrium. The problem has so many degrees of freedom that it is not easily tackled with existing tools.

In sum, we see that considerable advance has been made in the past few years toward a more realistic and fruitful theory of the firm. Nevertheless, much remains to be done. The picture of the firm on which much of our analysis is built is crude in the extreme, and in spite of recent refinements there remains a vast gap between the elegant curves of the economist and the daily problems of a flesh-and-blood executive. Economics describes as a science what business practices as an art, and much of the theory of the firm is an attempt to describe explicitly principles which a business man follows unconsciously. But economists have undoubtedly neglected the most difficult problem of business: how to make judgments when essential data are missing. The theoretical economist blithely assumes that anything that ought to be known can be known. Cost and revenue curves are data which must be known if profits are to be accurately maximized: ergo, says the economist, as profits are to be maximized we must assume cost and

[22] Carlson, *op. cit.*, chap. 6; and Hicks, *op. cit.*, chap. 15.

[23] E. H. Chamberlin, *The Theory of Monopolistic Competition*, chap. 3.

[24] H. von Stackelberg, *Marktform und Gleichgewicht* (Wien, 1934).

[25] A. Smithies and L. J. Savage, "A Dynamic Problem in Duopoly," *Econometrica*, Vol. 8 (1940), p. 130.

revenue curves to be known, although somewhat vaguely. Recently, however, the disturbing notion has been gaining ground that, as the business man cannot know the data on which to maximize profits, the very principle of maximizing profits is a false one. Hicks has suggested that a quiet life may be the most desired fruit of monopoly, and a good deal of evidence is accumulating to show that except in times of abnormal instability many, if not most business men, are content to follow rules of thumb in their price and sales policy, without bothering too much about whether a little adjustment here or there would not yield them a larger profit. Thus the studies of the Oxford economists[26] revealed the fact that many firms fix prices according to a more or less conventional "full cost" figure (average total cost, including profit) and are very loathe to change prices to meet changed conditions. In part, as R. L. Hall and C. J. Hitch[27] have shown, this behavior may not be inconsistent with a policy of maximizing profits, particularly in oliogopolistic conditions where there may be discontinuities in the firm's individual demand curve. It may also in part be due to a strong tendency for people untrained in functional thinking to regard the "cost of production" as something absolute and constant, a tendency which is sometimes expressed in legislative attempts to "fix prices according to cost of production."

It is probable that we are entering on a period when the main contributions to the theory of the firm will spring out of econometric investigations. The studies already made on statistical cost curves[28] have borne some fruit. Nevertheless, a great deal remains to be done in the investigation of actual decisions made by business men and their relation to the environment which surrounds these decisions. It is surprising that more has not been done on these lines in this country, where the art of asking pertinent and impertinent questions has perhaps developed most fully. The Oxford inquiry, for all the interest of its results, shows marks of the gentleman-amateur. One would like to see one of our high-powered fact-factories, armed with modern statistical equipment, a staff of inquisitive ex-social workers, and a grain or two of common sense, set off in pursuit of the elusive policy-maker and track down the minutest detail of his thoughts and actions. The results might be surprising, and might necessitate the recasting of a good deal of our analytical machinery.

[26] *Oxford Economic Papers:* Oct., 1938; May, 1939; and Feb., 1940.

[27] R. J. Hall and C. J. Hitch, "Price Theory and Business Behaviour," *Oxford Economic Papers*, May, 1939, p. 12.

[28] H. Staehle, "The Measurement of Statistical Cost Functions: An Appraisal of Some Recent Contributions," *Am. Econ. Rev.*, Vol. XXXII (June, 1942), pp. 321-33.

THE EXCHANGE EQUALIZATION ACCOUNT OF GREAT BRITAIN, 1932-1939: EXCHANGE OPERATIONS

By LOWELL M. PUMPHREY

This article attempts to bring out certain salient facts about the experience of the Exchange Equalization Account of Great Britain.[1] The account was the first of six major stabilization funds that operated in Great Britain, the United States, Belgium, France, the Netherlands, and Switzerland during the years immediately preceding the outbreak of the present war.

In their brief era, the funds enjoyed the distinction of arousing the intense curiosity of financial and economic circles throughout the world by reason of the secrecy that shrouded all their operations. They were, however, among the first casualties of the war. With their transformation into historical phenomena, interest in the funds has rapidly declined. The secrecy with which the funds were operated now threatens to thrust into obscurity the lessons they should have for students of monetary management. The following examination of the policies and techniques of the most active and long-lived of the funds is undertaken in the hope that it will throw light on the more significant implications of the stabilization fund mechanism for the theory and practice of monetary management.

The British account officially began operations on June 24, 1932, and continued to function as a *stabilization fund proper* until September 4, 1939, when the wartime exchange control came into effect. Mr. Neville Chamberlain, then Chancellor of the Exchequer, stated in 1933 that the aims of the account were to "smooth out the variations in exchange caused by three sets of phenomena: (1) the seasonal fluctuations; (2) the operations of speculators, which increase those seasonal fluctuations, and other fluctuations, too; and (3) this special flight of capital from other countries for the sake of finding a safer place to stop for a time."[2] This statement corresponds to the generally accepted view of the purpose of the stabilization fund mechanism. A study of the policies of the account, therefore, calls for an evalua-

EDITOR'S NOTE: Before joining the Army in November, 1941, the author was with the Federal Reserve Bank of New York.

[1] This article is based on material accumulated while the writer was a Fellow of the Social Science Research Council, 1938-1939, and The Brookings Institution, 1939-1940.

[2] *Hansard*, New Series, Vol. 277, May 4, 1933, Col. 1038.

tion of the validity of Mr. Chamberlain's statement as a realistic summation of the aims of the account.

Establishment of the Account. After Britain left the gold standard on September 21, 1931, the exchange value of sterling first declined sharply, then staged a partial recovery during the first three months of 1932 under the pressure of world-wide speculative purchases of sterling. In April, 1932, the British treasury, fearful that this speculative pressure would drive the sterling price of gold back to its pre-September, 1931, parity, decided that a new monetary device was required to halt the further appreciation of the foreign exchange value of sterling. Accordingly, the Finance act of 1932 included a provision for the establishment of an Exchange Equalization Account, under the direct control of the British treasury. This account was granted the power to issue up to approximately 167 million pounds of treasury bills, to be used in the purchase of gold and foreign exchange.

The establishment, in June, 1932, of the account with its statutory right of intervention on a large scale in the London exchange market meant that the British treasury received broad and indefinite powers over the external value of sterling. Despite the fact that the treasury severely restricted the freedom of the London financial market and achieved large measure of control over interest rates in the following years, it refrained until the very outbreak of the present war from interfering with spot exchange, gold, and commodity transfers, and thus deliberately refused to take the steps that would have meant the introduction of a *de facto* system of exchange control in Great Britain.

Since the Exchange Equalization Account remained throughout its existence a non-exchange-control device, one cannot rule out on *a priori* grounds the possibility that the treasury officials in charge of the account sincerely attempted to follow the equilibrium policy attributed to them by Mr. Chamberlain. As a corollary of the above, it is clearly necessary to study the actual operations of the account in order to arrive at any independent judgments about the policies of the account.

Methods of Operations of the Account. The account operated in three media: the London exchange, gold, and money markets. Its operations were carried out by a technical staff at the Bank of England, which acted as agent for the account.[3] The staff at the bank, operating under the instructions of the treasury officials, devised elaborate techniques for intervening in the London exchange market under an appropriate cloak of secrecy. At times they chose to operate under as complete secrecy as they could achieve, whereas on other occasions they de-

[3] Throughout its existence the account was identified with the bank, in the minds of men in the City, and the prestige of the bank in financial circles was thus attached to the account from the beginning.

liberately operated in full view of the market.[4] The account's gold operations arose directly out of its exchange operations. The managers of the account frequently found it necessary to intervene directly, by supplying or offering gold through the regular bullion agent of the bank in the London gold market in order to keep the sterling price of gold in line with the foreign exchange value of sterling.[5] These gold operations, however, being variants of the account's exchange operations, have no separate policy implications. The account's treasury bill operations were carried out along with the regular open market treasury bill operations of the bank. In theory these operations should have been straightforward, with automatic sales and purchases of treasury bills as counterparts to the account's purchases and sales of foreign exchange.[6] In practice, however, the account had to resort to complex interdepartmental transfers of "tap" bills in order to prevent the weekly variations in the volume of the "tender," *i.e.*, open-market, issue of treasury bills from serving as an automatic index to the volume of the account's exchange operations.[7]

[4] When the account wanted to conceal the fact that it was operating in the exchanges, it would make use of a number of banks, placing selling orders for exchange through one set of banks and placing buying orders for a greater or lesser amount of exchange, at the same time or later, through another group of banks.

In the normal course of its exchange operations, however, the account was chiefly interested in keeping the exchange market from being aware of the *extent*, as contrasted with the *fact*, of intervention. In these cases, the account relied on one or more of the great joint-stock banks, acting under its instructions, to carry out the requisite sales or purchases of foreign exchanges. Although the London exchange dealers and brokers developed an unusual capacity for sensing when the account was operating through the joint-stock banks, the market was in no position to estimate the *volume* of official operations undertaken by the banks.

When the account wanted the entire exchange market to be aware that it was actively and vigorously dealing in the exchanges, it would place orders to buy (or sell) foreign exchange with various exchange brokers in the city. The brokers would immediately communicate with all the exchange dealers and inform them that the "Control" (the colloquial name for the account) was offering (or buying), *e.g.*, dollars at 4.92. (The account never bought or sold foreign exchange in its own name; instead, it used the name of the Bank of England. The market, of course, was aware that the account was the principal in the transactions.)

[5] In its later years, the account frequently utilized the London gold market as an indirect means of supplying dollar exchange. It would fix the sterling price of gold at a level at which it was profitable for certain bullion arbitrage firms to purchase the gold and ship it to New York. These firms sold dollar exchange against their gold shipments.

[6] An examination of the money market operations of the account is beyond the scope of this article because these operations, although highly significant from the point of view of monetary theory, were the automatic by-products of, and without policy implications for, the exchange operations of the account.

[7] A number of estimates of the gold holdings of the Exchange Equalization Account, based on studies of the variations in the tender and tap issue of treasury bills and the funding operations of the treasury during the 1932-1939 period, have been prepared. The best of the estimates in print are those of Mr. F. W. Paish, in *Economica* (1935, 1936, 1937, and 1939). Unfortunately, the figures on the variations in the gold holdings of the account,

A close study of the technique of operations of the account at given periods and the current market reactions to those operations affords the best available clues as to the probable ***short-run*** aims of the account.[8] Since the authorities in charge of the British account chose to conceal their long-run aims, the student has to base his interpretation of those aims largely on the evidence that exists about the short-run policies of the account. In the following pages, such an attempt to find a common denominator of policy for the succession of day-to-day decisions of the account is made.

The Long-Run Exchange Policy of the Account. Fortunately, the prob-

---

so carefully worked out by Mr. Paish and others, are of little usefulness as indicators of the exchange policy of the account. In the absence of a straightforward official explanation of the purpose of given exchange operations of the account, the student requires an extremely detailed volume of indirect evidence to be able to draw conclusions regarding the probable purposes of those operations. Since he is concerned with the *purpose* of the account's intervention at given periods, what he really needs to know is the *volume* of foreign exchange bought or sold and the *price* at which the transactions are carried out. In addition, he needs to have some general idea as to the market demand situation at the time of the specific operations under consideration. A sale, for example, of 5 million dollars by the account on a quiet exchange market had far more effect than a sale of many times that amount on an extremely active market.

No matter how accurate the estimates of variations in the gold holdings of the account are over a given period, the figures are without real significance unless one knows the sterling rate at which the gold had been acquired or sold by the account. Generally, during the 1932-1939 period, an accumulation of gold by the account over a considerable period merely reflected the fact that an inflow of capital balances into London was taking place. So long as the account acquired this gold at stable sterling prices, its operations could hardly be deemed to represent an attempt to depreciate sterling. Similarly, the important periods of gold outflow from England largely reflected a shift of short-term balances from London to New York. To the extent that the account supplied the gold counterpart at relatively fixed sterling prices, it was not "supporting" so much as maintaining stable the exchange value of sterling.

In other words, more enlightening evidence as to the actual policy of the account is given by a study of the sterling price of gold over the 1932-1939 period, *i.e.*, the price at which the account was willing to buy or sell gold, than by a study of the variations in its gold holdings.

[8] This fact was well understood by the most astute operators, speculative and otherwise, in the principal exchange markets. They followed the operations of the account very closely in order to obtain an insight into the outlook of the account toward given market situations. Their success in anticipating the actions of the account is a matter of general knowledge in the world's exchange markets. The operators knew, for example, that when the account adopted a strict peg it was determined to prevent the pound from depreciating. On the other hand, when it was reluctant to lose gold in supporting sterling exchange at a given level, its cautious operations encouraged the speculators to take advantage of the situation by offering large amounts of sterling exchange on the market and thus frightening the account into allowing the sterling rate to depreciate. The bear speculators, in other words, were often able to determine the level at which the account "chose" to support sterling. The account consistently refused to undertake the only type of exchange operations that would effectively deal with bear speculation, *viz.*, major bear squeezes. Thus, the student, like the market operator, can generally gain an insight into the attitude of the managers of the account by following closely the type of exchange operations used by the account at crucial periods.

lem of interpreting the long-run exchange policy of the account is simplified by the fact that it had only three basic alternatives from which to choose. These were:

1. An "equilibrium policy" of attempting to iron out disturbing short-run fluctuations of sterling exchange without interfering with long-run equilibrium adjustments.

2. A policy of utilizing the account as a means of deliberate depreciation of the exchange value of sterling as far as possible without arousing foreign retaliation.

3. A policy of refraining from exchange operations that ran the risk of provoking hostile international reactions and of basing major policy decisions largely on considerations of practical expediency.[9]

The facts of the 1932-1939 experience furnish a clear basis for rejecting the second alternative as a realistic interpretation of the account's exchange policy. Thus, the dollar-sterling rate *rose* from 3.60 in June, 1932, to 4.68 in August, 1939. Over the greater part of the 1932-1939 period the dollar-sterling rate was above the pre-September, 1931, gold parity. Similarly, the franc-sterling rate rose from 92 francs to the pound in June, 1932, to 186 francs to the pound in August, 1939. This appreciation of sterling in terms of the two most important foreign currencies indicates that the account did *not* attempt systematically to depreciate the foreign exchange value of sterling.

Our problem, therefore, is to determine whether the account followed an equilibrium exchange policy or a policy of practical expediency. This problem is simplified by the fact that, throughout its existence, the account's exchange policy was decided largely with reference to the dollar, *i.e.*, the most important foreign currency. The gold value of the dollar was stable between June, 1932, and February, 1933, and again from January, 1934, until the end of the existence of the account. This meant that once the account decided on a dollar-sterling rate, the rate of exchange between sterling and other foreign currencies was beyond its influence. The account allowed its judgment as to the proper level of dollar-sterling exchange to be influenced only slightly by considerations of the effects of the dollar-sterling rate on other currencies.[10]

Since the account's exchange policy was in such large measure a dollar policy, our problem becomes that of determining whether the managers of the account attempted to follow a policy based on the

[9] The assumption that the account had no long-run exchange policy and operated always on the spur of the moment can be viewed as a variant of this third alternative.

[10] At certain periods, the account apparently allowed the French franc situation to influence its operations somewhat but it had to disregard the minor currencies.

principle of maintaining equilibrium between sterling and the dollar or whether they were content with following a policy of practical expediency, *i.e.*, basing their decision as to appropriate rates of exchange between the two currencies largely on their judgments as to the probability of given adjustments provoking retaliation by the American monetary authorities.

The failure of the account to *achieve* an equilibrium policy is reflected in the divergent course of dollar-sterling exchange and Anglo-American wholesale prices over the 1932-1939 period. The most marked divergence occurred in 1933, when the dollar-sterling rate rose over 50 per cent during the course of the year, whereas the ratio of American to British wholesale prices remained relatively unchanged. Between January, 1934, and August, 1936, both the dollar-sterling rate and the ratio of American to British wholesale prices were fairly stable. During this period, therefore, it is theoretically conceivable that the managers of the account attempted to follow a strict equilibrium policy. In the last six months of 1937, however, a development occurred which points to the conclusion that the account was definitely not *attempting* to follow an equilibrium policy. Despite the fact that the American wholesale price level declined relative to the British level during those months, the dollar-sterling rate rose slightly. Since the dollar price of gold was fixed, the account could have caused the dollar-sterling rate to fall (as it would have done if it had been following a strict equilibrium policy) simply by raising the sterling price of gold.

The evidence, therefore, suggests that the account did not attempt unsuccessfully to pursue a strict equilibrium policy, but rather was content to follow a less rigid policy. The operations of the account acquire a clear-cut rationale if interpreted as having been basically influenced over the greater part of the 1932-1939 period by the unwillingness of the British treasury officials in charge of the account to carry their dollar-sterling operations to the point where they would run into open conflict with the American treasury. They seem to have believed that the preservation of friendly relations with the American authorities would yield more dividends in the long run than would the pursuit of an inflexible equilibrium policy. The alternative of attempting to depreciate the dollar value of sterling had been ruled out as early as 1933 by the practical certainty that it would provoke prompt and effective American retaliation and be self-defeating. The decision in favor of a policy of expediency emerged as a result of the experience of the account in 1932 and 1933.

The Experimentation Phase, 1932. The fact that the account was established as a means of preventing the further appreciation of the

dollar value of sterling at a time when the dollar-sterling rate was still only 75 per cent of its pre-September, 1931, parity suggests that at that time the British treasury welcomed an undervalued pound. Since the United States adhered to the gold standard throughout 1932, the British authorities remained free that year to depreciate sterling *vis-à-vis* the dollar without fear of retaliation. During July and August, 1932, the account acquired considerable amounts of gold and dollar exchange as a consequence of its sterling sales, *i.e.*, it continued and even fortified its policy of allowing sterling to remain at its depreciated level. In September, however, the action of the managers of the account in resisting to the limit of their newly acquired gold resources the bear pressure against sterling that developed that month marked the abandonment of the policy of allowing sterling to depreciate.[11] The dollar-sterling rate dropped to the post-war low figure of 3.15 in November, after all the gold assets of the account had been exhausted in the futile effort to support the rate. Apparently, the virulent American criticism that was aroused at that time thoroughly disturbed the British treasury officials and caused them to incline thereafter to a policy of extremely cautious operations in the exchanges.

The Phase of Passive Coöperation, 1933-1936. The embarkation of the American government in March, 1933, on a policy of active depreciation of the dollar, so shortly after the disappointments of the 1932 account operations, brought the British treasury officials face to face with a very difficult decision. They had to decide whether they should attempt to resist the American policy by deliberately increasing the sterling price of gold *pari passu* with increases in the dollar price of gold, or whether they should adopt a policy of watchful waiting. The pursuit of the latter course offered the dismal prospect of seeing the dollar-sterling rate return to or above the pre-September, 1931, parity. On the other hand, the British treasury had no reason to feel confident that increases in the sterling price of gold would do other than provoke even greater increases in the dollar price of gold. The seeming futility of attempting actively to resist the American policy apparently was the deciding factor in favor of the decision of the British treasury to follow the policy of watchful waiting. As a consequence, the dollar price of gold rose by 69 per cent in the eleven months after the beginning of March, 1933, whereas the sterling price of gold rose by only 14 per cent.

[11] This is the case unless one credits the British officials with the subtlety of having deliberately entered in support of sterling in anticipation of an exhaustion of their gold resources and a subsequent accentuation of the decline in sterling. The bulk of the evidence, however, indicates that the September operations of the account were undertaken in good faith.

With the adoption by the United States, in January, 1934, of a fixed dollar price of 35 dollars per fine ounce of gold, the basic rationale for the British treasury policy of allowing the American authorities to determine the level of dollar-sterling exchange underwent a sudden change. The British government had from the beginning a very real stake in seeing the new gold buying policy of the United States left undisturbed. The fact that the United States had reëstablished a fixed dollar price for gold meant that the account could have depreciated the dollar-sterling rate at will thereafter by raising the sterling price of gold. American retaliation could have taken one or more of three forms: (1) a ***pari-passu*** increase in the dollar price of gold, (2) a lowering of the dollar price of gold, or (3) the introduction of restrictions that would have barred the American market to Empire gold. The British treasury had good reason to fear the consequences that would arise from either of the latter two alternatives. The British Empire, as the largest gold producing unit in the world and as a large-scale holder of the metal, had high stakes in the continuance of the American gold policy. Moreover, the arguments in favor of restraint on the part of the account in undertaking operations that might adversely affect the United States gold policy were made stronger in the period after 1934 by the growing world-wide distrust in the future of gold. The British treasury had no reason to anticipate gains from a slight depreciation of sterling relative to the dollar that would be commensurate with the losses that would result from an unfavorable shift of American gold policy.

The relative stability of the dollar-sterling rate in the 1934-1936 period, therefore, appears to have rested principally on a strong economic basis. There is good reason, however, to believe that the British treasury did not at first altogether relish its new and rather subservient exchange rôle. The course of events in March, 1935, for example, is highly revealing on this score. At the beginning of the month, the dollar-sterling rate suddenly dropped to 4.75, then promptly began to recover. It was believed in certain financial quarters that this episode was due to the account's first having deliberately abandoned its supporting operations and then having resumed its support of sterling under pressure from American official quarters. If this hypothesis is correct, it indicates that the prevailing dollar-sterling rates were regarded as too high by the British officials. The general maintenance of the dollar rate above the 4.86 level in the 1934-1936 period, if this view is correct, was undertaken reluctantly and only because of the greater unwillingness of the British treasury to menace the gold *status quo* by entering into conflict with the American authorities. Symptomatic of the absence of enthusiasm behind the British acquiescence in the prevailing dollar-sterling rates was

the lack of technical coöperation between the two treasuries. Thus, the account operated only in terms of the French franc from the beginning of 1933 until September, 1936. The account could have evaded the American treasury gold regulations of 1934 by shipping gold to New York and acquiring and holding dollar balances, in order to weaken sterling *vis-à-vis* the dollar. This practice was rejected, probably because of the fear that it would have provoked an alteration in the regulation.

Phase of Active Coöperation, September, 1936-August, 1939. With the conclusion of the Tripartite Agreement in September, 1936, coöperation between the American and British treasuries entered into a more active phase. The technical collaboration, which took the form of daily interfund operations and interchange of information,[12] was accompanied by indications of growing harmony between the account and the American Stabilization Fund. The hesitance of the account in acquiescing in the prevailing dollar-sterling rates disappeared with the deterioration of the international situation after 1936.

In this period some revealing indications of the "coöperative" attitude of the account occurred. In the last half of 1937, for example, the dollar-sterling rate rose despite the relatively greater decline of American than British wholesale prices during that period. Again in November, 1938, the account halted the depreciation of the dollar-sterling rate at the request of the American treasury. Finally, the dollar-sterling peg of 4.68 that was maintained from February until the final week in August, 1939, was adhered to, despite the fact that the rate was recognized in financial circles throughout the world as being indefensible over the long run and as being a standing inducement to bear speculation against the pound.

In all of these cases, the managers of the account could have al-

[12] The technique of daily interfund coöperation established by the Protocol (October 13, 1936) to the Tripartite Agreement was as follows: Each fund undertook to control the exchange value of its own currency in coöperation with all the other funds. It carried out all the official exchange operations in its own market, and delegated the task of controlling the exchange value of its own currency in foreign centers to the funds in those centers. When one of the currencies was noticeably "weak," *i.e.*, tending to depreciate in terms of other currencies, large-scale supporting operations in many exchange markets were often necessary. The informal practice followed was to have the fund whose currency was weak support the exchange value of its own currency in its own market at the level it deemed defensible. The other funds would support the weak currency in their own markets at the level designated by the fund concerned. Thus, if sterling were weak in terms of the dollar, the account would have the responsibility of supporting sterling actively in the London market. As soon as that market closed for the day (around 1:30 P.M. New York time), the American Stabilization Fund would undertake to support sterling in the New York market at the level suggested by the account. As a result of the adherence of Belgium, Switzerland, and the Netherlands to the agreement, a system of interfund operations in nearly all the important free exchange markets in the world was possible. At the end of each day, the fund which sold foreign exchange on balance earmarked gold to the credit of the various supporting funds.

lowed the dollar-sterling rate to decline without fear of American retaliation. Indeed, the account had a potentially freer hand in this than in the earlier period, for it had the power, under the Tripartite Agreement, to operate in terms of the dollar, *i.e.,* the power to buy dollar exchange and convert the balances into gold earmarked to its credit in New York. Furthermore, the American Treasury was in a difficult strategic position in 1938 and 1939. Growing dissatisfaction was being expressed, both within and without Congress, over the American gold buying program. Even if the British account had chosen to allow the sterling price of gold to rise, the American authorities could hardly have afforded to retaliate by increasing the dollar price of gold. Furthermore, in view of the growing war clouds, retaliation in the form of closing the New York market to British gold would have run the risk of provoking disastrous public reactions within the United States.

The British treasury's coöperation, therefore, seems to have rested on a desire to aid the American treasury in avoiding further difficulties with Congress during this very troublesome period. The managers of the account must have realized that a sharp decline in the dollar-sterling rate would have aggravated the hostile reactions of Congress and caused serious trouble for the American monetary authorities.

Two reasons may be suggested for this strong desire to keep on friendly terms with the American treasury. First, there was the continued stake of the Empire in the gold policy of the United States at a time when that policy was being threatened by internal and external developments. Secondly, the growing international tension made it highly desirable for the British treasury not to incur the displeasure of the American monetary authorities by taking advantage of a temporary opportunity to depreciate sterling. The British officials may well have anticipated a situation in which the good will of these same American officials would be an invaluable asset.

The Franc Policy of the Account. With dollar-sterling rates largely determined by considerations of their influence on Anglo-American relations, the managers of the account were generally unable to give much consideration to the course of franc-sterling exchange.

From June, 1932, until March, 1933, the dollar policy of the account was *ipso facto* its franc policy, since both France and the United States had fixed gold parities. Between March, 1933, and September, 1936, the gold equivalent of sterling fell from 70 per cent to 60 per cent of its 1931 parity. Since the gold equivalent of the dollar experienced an even greater decline over the same period, the maintenance of a stable sterling price of gold after March, 1933, would probably have involved a dollar-sterling rate of about $5.50. Although

the necessity for preventing the pound from becoming thus grossly overvalued *vis-à-vis* the dollar involved definite injury to France and the other gold bloc countries, this seemed preferable to allowing a serious disequilibrium between the pound and sterling to develop.

The relative stability of the dollar-sterling rate between October, 1936, and April, 1938, taken in conjunction with the dollar policy of the account, meant that the ultimate decisions regarding the successive franc depreciations in those months lay with the American treasury. All the Tripartite authorities, as we have seen, acquiesced in the depreciations in the gold content of the franc that took place after September, 1936. Nevertheless, if the American treasury had attempted to oppose these franc depreciations, it seems probable that the account would, however reluctantly, have followed the American lead.

With the successful pegging of the franc to the pound in May, 1938, the franc became a satellite to the pound. The officials in charge of the account, therefore, were concerned during the final sixteen months of its operations as a stabilization fund almost solely with the course of dollar-sterling exchange.

The Political Character of the Account's Exchange Policy. If the above interpretation of the exchange policy of the account is at all sound, Mr. Chamberlain's statement of that policy does not correspond with the facts of the 1932-1939 experience. Instead of following an equilibrium policy, the British treasury pursued a basically political exchange policy, in which decisions regarding alterations in the exchange value of sterling rested largely on its judgment as to the political expediency of such adjustments.

The long-run exchange policy of the account has two major implications for the theory and practice of monetary management. In the first place, the subservience of British exchange policy to American exchange policy after March, 1933, means that a full understanding of Anglo-American monetary relations during the 1932-1939 period requires an understanding of the motives behind American exchange policy. In this article, however, lack of space has compelled an acceptance of that policy as a datum.

In the second place, the severe technical limitations imposed on the account by the political motivations of its operations meant that the account failed to realize the full potentialities inherent in the stabilization fund device. Nevertheless, the experience of the account, limited as it was, throws considerable light on the potential usefulness of the fund mechanism in the post-war era.

The Future of the Stabilization Fund Mechanism. The future usefulness of stabilization funds is obviously dependent upon the restoration of a world economic system in which freedom of transfer of

private balances is regarded as being in the long-run interest of national economies. If official opinion in the future inclines, as a result of the experiences of the 1930's, to the belief that the international transfer of private balances operates largely as a disequilibrating factor, we are likely to see the widespread continuation of systems of *exchange control.*[13] Properly used, the stabilization fund mechanism enables the monetary authorities of a country to maintain exchange equilibrium through appropriate exchange rate adjustments. The use of a stabilization fund either to depreciate or to appreciate the exchange value of a currency, beyond that necessary to long-run equilibrium in a market free to private operators, represents a perversion of the mechanism.

The pursuit, in the future, of the goal of exchange equilibrium by means of stabilization fund systems calls for a general recognition of the fact that, in the absence of identical national ***konjunktur*** policies, it entails abandonment of permanent stability in exchange rates. The adoption of stabilization funds, logically, implies a decision in favor of effecting adjustments toward equilibrium *via* exchange rate shifts. The limited usefulness of stabilization funds in the 1930's arose from the fact that the United States maintained a fixed dollar price for gold and Britain felt compelled to maintain rough exchange rate stability between sterling and the dollar. Under the circumstances, an equilibrium policy was out of the question. No two countries can maintain independent, and varying, price policies and, at the same time, preserve permanent stability in the exchange rate between their currencies. If such a policy is attempted, stabilization funds can then be used as nothing more than offsetting mechanisms similar to central bank open market technique under gold standard conditions. If the stabilization funds are to be used as "equalization" instruments, exchanges must be allowed to fluctuate to effect equilibrium.

Granted that two or more countries in the future decide to utilize the stabilization fund device, the experience of the account throws considerable light on the proper techniques to be adopted. The experience of the account demonstrated that two types of international gold movements, those arising out of "panic transfers" of short-term balances and those arising out of speculative transactions, created the most difficult problems for the stabilization funds.

The panic transfers that played so large a rôle in the international monetary sphere during the 1930's were motivated largely by fear of the currency situation in the country of origin. The transferrers, fearing

[13] In this regard, it should be noted that the failure of the monetary authorities in France, the Netherlands, and Switzerland to achieve a cessation of the outward flow of capital balances even after the adoption of the stabilization fund technique may serve indefinitely to discredit the mechanism in those countries.

that the value of their holdings would soon approach zero (because of sequestration, etc.) unless removed to another country, hastened to acquire foreign exchange with little or no regard to the rate at which the transfer could be effected. Since these transfers had this unconditional demand character, stabilization funds could stop them only by outright prohibitions, *i.e.*, exchange control proper, or, on rare occasions, by a drastic depreciation of the exchange value of their currency. Thus, as the panic transfers came to dominate the international exchanges, the pressure to abandon the stabilization fund system in favor of some form of exchange control became very great.

The gold movements arising from speculative transactions differed conspicuously, in the highly conditional character of the speculative demand for foreign exchange, from the movements arising from panic transfers. Speculators were concerned with the opportunity for profits from *anticipated shifts* in the price of foreign currencies. They contained to operate as long as they were successful in their diagnoses. The task of the stabilization fund authorities, therefore, was to outwit the speculators.

All of the attempts of the British account after January, 1934, to cope with serious bear speculation against sterling failed because the account's unwillingness to allow the exchange value of sterling to fluctuate freely over short periods inevitably condemned it to the use of tactics that were vulnerable to continued bear pressure. During its existence as a stabilization fund, the account attempted to handle the problem of bear speculation against sterling by the use of "minor bear squeezes," by yielding gradually to bear pressure, by pegging operations, and even by temporarily withdrawing from the exchanges. These tactics were all inadequate. In general, their obviousness proved self-defeating, and even on the rare occasions when they caught the speculative fraternity by surprise, they failed to punish it by entailing severe losses. Success in dealing with determined speculators called for exchange operations that would both surprise and severely punish them. Only gigantic bear squeezes offered any prospect of achieving this dual purpose.[14] The refusal of the account to take advantage of the many opportunities it had to carry out such operations indicates that it viewed the elimination of bear speculation as less urgent than the maintenance of relatively stable dollar-sterling exchange relationships. Yet bear speculation frequently defeated this latter purpose.

Although bear squeezes are adequate to cope with speculation, they are subject to the criticism that they entail violent and rather large ex-

[14] See F. D. Graham, "Achilles' Heels in Monetary Standards," *Am. Econ. Rev.*, Vol. XXX (March, 1940), pp. 16-32, for a demonstration of the necessity of resorting to bear squeezes in order to keep speculation under control.

change fluctuations that may prove damaging to normal commercial trading relations. This difficulty, however, can be taken care of by proper action on the part of stabilization fund authorities. The following represents a possible solution: The treasuries of those countries using stabilization funds should issue a joint statement declaring that speculation against their currencies is not in the public interest and will be dealt with by "appropriate" exchange operations. The declaration furthermore should emphasize that, in view of the fact that the goal of maintaining equilibrium relationships between the various currencies would involve variable exchange rates, the authorities are prepared to supply and purchase forward exchange at any time in order to protect commercial firms from the risk of such fluctuations. Commercial firms that fail to take advantage of the official forward hedging facilities would be deemed *prima facie* guilty of taking speculative risks. Once the determination of the monetary authorities of the principal countries to deal vigorously with speculators is made clear, the problem of controlling speculation will be well on the road to definitive solution.

The fact to note about these recommended changes in stabilization fund policy is that they require a change in attitude on the part of the monetary authorities of the world toward the propriety of exchange rate fluctuations. The 1932-1939 period saw a great advance in the outward forms of intertreasury and central bank collaboration. The stabilization funds, however, could not operate as mechanisms for achieving international equilibrium in the exchanges because of the Anglo-American decision in favor of relative dollar-sterling exchange and gold price stability. The stabilization fund system of the 1930's represented a compromise between the gold standard system of fixed parities and the system of appropriately variable exchange rates to correspond with more or less spontaneous changes in relative price levels. This involved the sacrifice of the psychological advantages traditionally associated with fixed gold parities and the economic advantages arising from international equilibrium in the exchanges. In the future, the proper exploitation of the stabilization fund mechanism awaits the general acceptance in commercial, financial, and governmental circles of the necessity, in a world of disparate national price structures and divergent business cycle policies, of allowing exchange rate fluctuations if stable *relationships* between the exchange, and the relative internal, values of the currencies concerned are to be maintained.

GRADUATE STUDENTS IN ECONOMICS, 1904-1940

By Lewis A. Froman

More than ten years ago, a study, *Graduate Students in Economics, 1904-1928,* appeared in the *Review.*[1] The present study brings the previous analysis up to date and combines the findings of both studies for summary purposes.

The same techniques were employed for both studies so that they may be compared and combined. All information was obtained from the annual lists of "Doctoral Dissertations in Political Economy in Progress in American Universities and Colleges" which have been published in the *American Economic Review* since 1904. Since a single name may appear in successive years, the method employed to eliminate duplication was to start with the most recent year (1940, in this case) and, as preceding years were tabulated, include no names which had appeared on previously analyzed lists. This accounts for the fact that the figure for 1940 is about twice as large as the figures for other years. Since reports from the universities are not always complete, the figures somewhat understate the facts. The period of 12 years covered shows nearly the same number of candidates as the 25 years in the earlier analysis.

Table I shows the total number of candidates at 40 of the leading institutions by periods (1904-1928 and 1929-1940) and as a total for 37 years.[2] This table shows that the total number pursuing graduate work during the past 12 years was as great as the number pursuing graduate work during the 25-year period 1904-1928.[3] Another change is the wider dispersion of candidates among institutions than was the case up to 1928. Three—Columbia, Chicago, and Wisconsin—had 50 per cent of the candidates between 1904 and 1928, but these same universities had only 36 per cent of the candidates between 1929 and 1940. Fourteen institutions had 90 per cent of the candidates during the first period, but only 78 per cent of the candidates during the past 12 years.

Editor's Note: The author is dean of Millard Fillmore College and professor of finance at the University of Buffalo.

[1] *Am. Econ. Rev.*, Vol. XX (June, 1930), p. 235.

[2] The arrangement of the information added by this recent tabulation will follow very closely that presented in the earlier study.

[3] The figure of 2811 for the period 1929-1940 is slightly exaggerated because of the duplications which were not eliminated for the last year analyzed.

TABLE I—CANDIDATES PREPARING DOCTORAL THESES, 1904–40

Institution	1904–28[a]		1929–40		1904–40	
	Number of Candidates	Per Cent	Number of Candidates	Per Cent	Number of Candidates	Per Cent
1. Columbia	722	25.7	449	16.0	1171	20.8
2. Chicago	414	14.7	340	12.1	754	13.4
3. Wisconsin	291	10.4	231	8.2	522	9.3
4. Harvard	239	8.5	251	8.9	490	8.7
5. Pennsylvania	209	7.1	144	5.1	353	6.3
6. Cornell	124	4.4	110	3.9	234	4.1
7. Minnesota	81	2.9	110	3.9	191	3.4
8. Illinois	56	2.0	118	4.2	174	3.1
9. Yale	82	2.9	66	2.3	148	2.6
10. Johns Hopkins	80	2.8	61	2.2	141	2.5
11. Ohio	44	1.6	96	3.4	140	2.5
12. California	56	2.0	80	2.8	136	2.4
13. Michigan	50	1.8	60	2.1	110	2.0
14. Northwestern	23	.8	78	2.8	101	1.8
15. Princeton	46	1.6	51	1.8	97	1.7
16. Iowa	21	.7	74	2.6	95	1.7
17. Stanford	34	1.2	49	1.7	83	1.5
18. Robert Brookings	68	2.4	16	.6	84	1.5
19. Radcliffe	41	1.5	33	1.2	74	1.3
20. Catholic	39	1.4	20	.7	59	1.1
21. American University	8	.3	46	1.6	54	1.0
22. New York University	11	.4	42	1.5	53	1.0
23. Virginia	—	—	41	1.5	41	.8
24. Bryn Mawr	22	.8	9	.3	31	.6
25. North Carolina	—	—	30	1.1	30	.5
26. Duke	—	—	28	1.0	28	.5
27. Washington University	6	.2	13	.5	19	.3
28. Texas	1	—	18	.6	19	.3
29. Toronto	4	.1	15	.5	19	.3
30. Pittsburgh	—	—	17	.6	17	.3
31. Brown	1	—	14	.5	15	.3
32. Clark	—	—	13	.5	13	.2
33. Kentucky	—	—	13	.5	13	.2
34. University of Washington	7	.3	6	.2	13	.2
35. Missouri	5	.2	7	.3	12	.2
36. McGill	—	—	11	.4	11	.2
37. Nebraska	2	.1	9	.3	11	.2
38. Indiana	8	.3	2	.1	10	.2
39. Fordham	—	—	7	.3	7	.1
40. Vanderbilt	—	—	6	.2	6	.1
Others	14[b]	.5	27[c]	1.0	41	.8
Totals	2809	100.0	2811	100.0	5620	100.0

[a] The figures given in this column do not agree with those reported in the June, 1930, article. The reason for this is that the 575 candidates reported for 1928 in the 1930 study included duplications. With the availability of the lists for subsequent years, these duplications were eliminated and the official number for 1928 becomes 261 instead of 575.

[b] Studying at: Institute of Economics, Syracuse, Denver, Washington and Lee, Oklahoma Agricultural and Mechanic, North Dakota, and Colorado.

[c] Studying at: Colorado, Kansas, St. Louis, North Dakota, West Virginia, Southern California, Syracuse, Western Reserve, Utah, Oxford (England), Oklahoma Agricultural and Mechanic, Georgetown, and Arbiter (Germany).

The total number of candidates pursuing graduate work in economics at the institutions with the largest number of candidates is given by years in Table II. The total number of candidates preparing doctoral theses in economics has not continued to grow as it did between 1904 and 1928. The most rapid increase took place during the middle 1920's, with a peak in 1927.[4] The year 1932 is the second largest. In 1933, the number of candidates fell very drastically and as late as 1937 the number of candidates was at the lowest level it had been since 1924. In recent years the number of candidates has not fluctuated very far from the 200 mark. The extraordinary variations in one or two cases, especially Cornell, suggest lack of full reporting at times. Among institutions, the decline in the relative number of candidates studying at Columbia and the increases in the number of candidates at institutions other than the leading ones are the most noticeable changes.

Table III shows, first, the importance of the various subjects for the period 1929-1940. The largest number of candidates were preparing theses in the field of agricultural economics. Almost as many candidates chose money and banking as the field for their dissertations. In the 12-year period, there would seem to be a downward trend in the number of those preparing theses in agriculture, while the trend in the second largest field, money and banking, is slightly upward. Third in importance among theses subjects is the group, accounting, business methods, investments and exchanges, and the trend in this field would also seem to be slightly upward for the 12-year period. In fourth and fifth places, with about an equal number of candidates, are the fields of public finance and labor problems.

Table III shows also a total of 5620 for all doctoral dissertations in economics on all subjects from 1904-1940. In the earlier study (1904-1928), the field of economic history was first but, in the later, is seventh. The second most important subject for the earlier period was labor problems, which ranked fifth for the past 12 years.

For the entire 37-year period, agriculture holds first place; labor problems and economic history follow closely; accounting, money and banking, and social problems follow in fourth, fifth, and sixth places, respectively. Table IV attempts to show the importance, both absolute and relative, of the 7 largest subject matter fields for the 17 institutions which had the largest number of candidates between 1929 and 1940. An examination of the percentages in the table will show, for example, that four universities—Cornell, Wisconsin, Minnesota and Harvard—account for approximately 55 per cent of the total candidates in agri-

[4] This, of course, disregards the large figure for 1940, which, as previously explained, is not comparable to the other years. There were 286 candidates in 1927, a figure not shown in the present Table II but in Table II of the previous study.

1942] FROMAN: GRADUATE STUDENTS IN ECONOMICS, 1904-1940 821

TABLE II—DOCTORAL CANDIDATES BY INSTITUTIONS: NUMBERS AND PERCENTAGES

	Institution	Columbia	Chicago	Harvard	Wisconsin	Illinois	Pennsylvania	Cornell	Minnesota	Ohio	Yale	Michigan	Johns Hopkins	California	Princeton	Stanford	Iowa	Northwestern	American University	Others	Total
Numbers by Years	1929	14	52	20	26	4	6	16	16	1	9	7	6	2	2	5	4	5	3	26	224
	1930	45	20	31	19	2	14	23	11	9	4	8	1	8	5	9	2	3	7	21	242
	1931	40	27	15	11	13	19	4	11	10	14	2	7	2	—[a]	7	4	7	—[a]	21	214
	1932	29	33	25	30	18	18	8	5	9	6	6	7	9	6	5	8	9	4	24	259
	1933	17	15	19	15	9	9	29	4	9	4	4	7	1	3	2	5	6	2	28	188
	1934	37	18	36	10	9	10	8	6	8	3	—[a]	6	6	4	6	5	6	3	31	212
	1935	40	28	24	11	8	13	2	8	7	3	2	5	1	6	—[a]	5	8	2	31	204
	1936	30	11	11	22	25	4	4	6	8	5	3	3	8	2	3	9	10	—[a]	32	196
	1937	27	15	12	21	2	10	1	8	7	3	5	3	9	5	4	6	—[a]	3	36	176
	1938	28	21	18	11	7	4	—[a]	9	11	3	4	5	13	3	5	9	3	5	41	200
	1939	43	29	11	9	5	12	5	8	4	5	6	4	10	3	—[a]	9	3	3	38	207
	1940	99	71	29	46	17	25	10	18	13	7	13	7	11	12	3	8	18	14	68	489
	Total 1929–40	449	340	251	231	118	144	110	110	96	66	60	61	80	51	49	74	78	46	397	2811
	Total 1904–1928	722	414	239	291	56	209	124	181	44	82	50	80	56	46	34	21	23	8	229	2809
	Grand Total	1171	754	490	522	174	353	234	191	140	148	110	141	136	97	83	95	101	54	626	5620
Percentage by 5-Year Periods	1939–40	20.4	14.4	5.7	7.9	3.2	5.3	2.2	3.7	2.4	1.7	2.7	1.6	3.0	2.2	.4	2.4	3.0	2.4	15.2	99.8
	1934–38	16.4	9.4	10.2	7.6	5.1	4.1	1.5	3.7	4.1	1.7	1.4	2.2	3.7	2.0	1.8	3.9	2.7	1.3	17.3	100.1
	1929–33	12.9	13.0	9.8	9.0	4.1	5.8	7.1	4.2	3.4	3.3	2.4	2.5	1.9	1.4	2.5	2.0	2.7	1.4	10.6	100.0
	1924–28	16.3	16.7	6.9	10.6	2.2	8.7	4.2	5.5	2.7	2.4	2.0	1.5	1.6	1.5	1.3	.5	1.7	.7	13.0	100.0
	1919–23	30.4	16.3	8.2	9.9	.9	10.7	1.7	2.4	.5	1.9	1.9	2.0	3.6	1.7	.6	.6	.3	—[a]	6.4	100.0
	1914–18	41.8	13.0	6.0	8.3	2.7	3.7	4.3	—[a]	1.9	2.3	1.0	5.6	.6	1.7	1.2	2.1	—[a]	—[a]	3.7	99.9
	1909–13	26.1	14.7	12.3	12.0	3.6	2.7	8.4	.6	.3	4.8	2.1	4.5	2.4	.9	2.7	—[a]	—[a]	—[a]	1.8	99.9
	1904–08	25.6	2.5	18.6	12.6	—[a]	7.0	7.5	—[a]	—[a]	7.5	1.5	4.0	1.5	3.5	—[a]	.5	.5	—[a]	7.0	99.8
	TOTAL	20.8	13.4	8.7	9.3	3.1	6.3	4.2	3.4	2.5	2.6	2.0	2.5	2.4	1.7	1.5	1.7	1.8	1.0	11.1	100.0

[a] Incomplete

TABLE III—DOCTORAL CANDIDATES BY SUBJECTS: NUMBERS AND PERCENTAGES

	Subject Group	Theory	Economic History	Agriculture	Manufacturing Industries	Transportation and Communication	Trade and Commerce	Accounting, Business Methods, etc.	Capital and Capitalistic Organization	Labor Problems	Money, Prices, Credit and Banking	Public Finance, Taxation and Tariff	Population and Migration	Social Problems	Insurance and Pensions	Charities and Relief Measures	Statistics and Its Methods	Total
Numbers by Years	1929	14	18	31	8	8	9	11	3	12	16	11	10	66	3	1	3	224
	1930	12	12	50	7	16	7	29	10	28	24	18	13	10	3	—[a]	3	242
	1931	3	26	17	5	20	7	18	8	25	30	24	8	11	5	2	5	214
	1932	14	21	39	12	16	9	18	15	20	30	31	4	14	7	—[a]	9	259
	1933	5	7	42	1	6	10	17	17	15	18	15	2	16	9	2	6	188
	1934	9	9	33	11	11	9	21	8	17	32	24	8	9	3	—[a]	8	212
	1935	11	18	20	8	6	13	28	6	16	35	16	2	8	10	4	3	204
	1936	10	12	19	6	11	13	31	5	20	29	26	—[a]	8	4	1	1	196
	1937	11	19	17	14	13	11	13	6	13	26	13	6	7	3	4	—[a]	176
	1938	6	17	25	5	5	16	25	9	14	36	11	3	13	5	2	8	200
	1939	13	14	19	10	12	16	27	4	25	20	21	4	13	4	—[a]	5	207
	1940	50	22	52	20	17	37	67	18	46	54	44	7	30	11	3	11	489
	Total 1929–1940	158	195	364	107	141	157	305	109	251	350	254	67	205	67	19	62	2811
	Total 1904–1928	165	372	255	98	153	121	228	94	357	181	235	106	321	51	18	54	2809
	GRAND TOTAL	323	567	619	205	294	278	533	203	608	531	489	173	526	118	37	116	5620
Percentage by 5-Year Periods	1939–40	9.1	5.2	10.2	4.3	4.2	7.6	13.5	3.2	10.2	10.6	9.3	1.6	6.2	2.2	.4	2.3	100.1
	1934–38	4.8	7.6	11.5	4.5	4.7	6.3	11.9	3.4	8.1	16.0	9.1	1.9	4.6	2.5	1.1	2.0	100.0
	1929–33	4.3	7.5	15.9	2.9	5.9	3.7	8.3	4.7	8.9	10.5	8.8	3.3	10.4	2.4	.4	2.3	100.2
	1924–28	5.6	10.4	11.7	3.7	4.7	3.5	13.1	2.2	12.4	6.0	6.9	2.2	12.8	1.7	.3	2.7	99.9
	1919–23	5.2	14.4	9.6	1.4	4.9	6.3	7.1	3.4	11.0	7.5	7.1	4.2	13.5	2.0	.9	1.6	100.1
	1914–18	6.8	15.7	5.8	3.7	5.4	4.6	3.9	4.8	13.0	5.6	11.4	5.8	8.7	2.3	1.2	1.2	99.9
	1909–13	7.2	14.1	4.5	5.1	8.1	2.4	2.4	3.6	18.9	7.8	9.3	4.2	7.8	1.8	.6	2.1	99.9
	1904–08	5.0	18.6	8.0	5.5	7.5	5.0	2.0	6.0	9.0	5.5	12.1	5.5	9.5	.5	—[a]	—[a]	99.7
	Total	5.7	10.1	11.0	3.65	5.2	4.95	9.5	3.6	10.8	9.45	8.7	3.1	9.4	2.1	2.1	.7	100.05

[a] Incomplete

TABLE IV—DOCTORAL CANDIDATES BY INSTITUTIONS AND BY SUBJECT GROUP, WITH PERCENTAGE DISTRIBUTION, 1929–40

Subject Group	Columbia	Chicago	Wisconsin	Harvard	Pennsylvania	Illinois	Cornell	Minnesota	Ohio	California	Northwestern	Iowa	Yale	Johns Hopkins	Michigan	Princeton	Stanford	Others
Economic history	52	48	3	20	3	3	—[a]	—[a]	5	2	3	2	3	6	2	1	—[a]	43
Percentage	*26.5*	*24.5*	*1.5*	*10.2*	*1.5*	*1.5*	—[a]	—[a]	*2.6*	*1.0*	*1.5*	*1.0*	*1.5*	*3.1*	*1.0*	*0.5*	—[a]	*21.9*
Labor problems	58	28	29	16	15	10	5	3	2	8	3	1	4	9	4	8	3	45
Percentage	*23.1*	*11.2*	*11.6*	*6.4*	*6.0*	*4.0*	*2.0*	*1.2*	*0.8*	*3.2*	*1.2*	*0.4*	*1.6*	*3.6*	*1.6*	*3.2*	*1.2*	*17.9*
Social problems	19	35	20	22	11	6	4	15	5	3	6	9	6	1	2	—[a]	4	38
Percentage	*9.2*	*17.0*	*9.7*	*10.7*	*5.3*	*2.9*	*1.9*	*7.3*	*2.4*	*1.5*	*2.9*	*4.4*	*2.9*	*0.5*	*1.0*	—[a]	*1.9*	*18.4*
Agriculture	21	16	55	38	6	14	59	49	12	19	5	4	1	4	3	2	9	47
Percentage	*5.8*	*4.4*	*15.1*	*10.4*	*1.6*	*3.8*	*16.2*	*13.5*	*3.3*	*5.2*	*1.4*	*1.1*	*0.3*	*1.1*	*0.8*	*0.5*	*2.5*	*12.9*
Accounting, business methods, investments, exchanges	52	33	13	17	21	27	3	7	20	6	19	12	9	7	14	3	5	36
Percentage	*17.1*	*10.9*	*4.3*	*5.6*	*6.9*	*8.9*	*6.0*	*2.3*	*6.6*	*2.0*	*6.3*	*3.9*	*3.0*	*2.3*	*4.6*	*1.0*	*1.6*	*11.8*
Public finance, taxation, and tariff	37	28	35	17	11	11	7	8	6	5	6	7	15	8	4	6	3	42
Percentage	*14.5*	*10.9*	*13.7*	*6.6*	*4.3*	*4.3*	*2.7*	*3.1*	*2.3*	*2.0*	*2.3*	*2.7*	*5.9*	*3.1*	*1.6*	*2.3*	*1.2*	*16.4*
Money and banking	77	36	17	34	10	15	12	8	23	10	14	9	7	8	8	7	8	47
Percentage	*22.0*	*10.3*	*4.9*	*9.7*	*2.9*	*4.3*	*3.4*	*2.3*	*6.6*	*2.9*	*4.0*	*2.6*	*2.0*	*2.3*	*2.3*	*2.0*	*2.3*	*13.4*
Per cent of total candidates for 12 years	*16.0*	*12.1*	*8.2*	*8.9*	*5.1*	*4.2*	*3.9*	*3.9*	*3.4*	*2.8*	*2.8*	*2.6*	*2.3*	*2.2*	*2.1*	*1.8*	*1.7*	*100*

[a] Incomplete

cultural economics. The concentration in economic history is even greater, with two institutions, Columbia and Chicago, accounting for 51 per cent of all candidates. Forty-six per cent of all candidates in the field of labor problems is found in three universities—Columbia, Wisconsin, and Chicago.

Table V shows the average number of years elapsing between the various degrees, together with the number of those who secured intermediate degrees between their degrees of bachelor and doctor.[5] In the study of the 25-year period, 1904-1928, the average number of years elapsing between the degree of bachelor and doctor was 7.8 years.[6] For

TABLE V—AVERAGE NUMBER OF YEARS FOR COMPLETION OF WORK FOR VARIOUS DEGREES, 1929–40[a]

Year	Between bachelor and doctor	Between bachelor and master	Between master and, doctor	Candidates without degrees prior to doctors'	
				Number	Percentage of total
1929	8.7	2.3	4.4	64	28.0
1930	8.4	2.4	4.2	50	20.7
1931	9.0	2.6	5.1	44	20.6
1932	9.2	2.9	5.4	39	15.1
1933	8.8	2.9	4.8	43	22.9
1934	9.9	2.8	5.5	49	23.9
1935	9.3	3.0	5.9	50	24.5
1936	9.7	2.8	5.5	32	16.3
1937	9.5	2.7	4.9	39	22.2
1938	9.8	2.7	5.6	40	20.0
1939	9.6	2.3	5.5	46	22.2
1940	9.4	2.3	5.1	118	24.1

[a] The lists from which the data for this study were taken report only those preparing theses. It is probable that some of these theses were never completed, and consequently Table V is in error to this extent.

the 12-year period, 1929-1940, the average number of years elapsing was 9.3.[7]

An opposite trend is shown for the number of years elapsing between the granting of the bachelors' and masters' degrees to those who later worked toward doctors'. For the 25-year period 1904-1928, the average is 3.2 years, but for the 12-year period 1929-1940, the average is 2.6 years.

[5] The bachelors' degrees conferred may have been B.S., B. Com., etc.; no attempt was made to distinguish between the various types. The information available for this study does not always indicate whether the doctor's was actually granted. In some cases it is known that the work has not been completed, and is not likely to be completed.

[6] See Table IX of previous study.

[7] In the earlier study the most extreme case was one which showed 45 years elasping between the bachelor's and doctor's degrees. The case of a 40-year interval between these two degrees was the most extreme for the period 1929-1940. For this latter period, there were 63 cases of more than 20 years of elapsed time.

An interval of about 5 years between the master's degree and the doctor's (for those who took masters' degrees) shows great stability throughout the entire period, 1904-1940. For the 25-year period 1904-1928, approximately one in every 3 candidates working for his doctor's had no intermediate degree; for the 12-year period 1929-1940, only about one in every 4 candidates had no intermediate degree.

Table VI shows that more than 30 institutions reported candidates to be working on doctors' degrees in each year since 1932, except in 1935, when only 29 institutions reported candidates. The most recent year analyzed, 1940, shows the largest number, 37. Only 8 institutions reported doctoral candidates in 1904. The number of institutions granting masters' degrees to those who later became candidates for doctors' also is increasing. From 1904-1928 this number grew from 8 to

TABLE VI—NUMBER, DISTRIBUTION AND MASTERS' DEGREES AMONG DOCTORAL CANDIDATES, 1929–40

Year	Institutions reporting	Distribution		Masters' degrees	
		Number of individuals	Average per institution	Number of individuals	Institutions represented
1929	27	224	8.3	95	27
1930	27	242	9.0	192	57
1931	23	214	9.3	170	55
1932	29	259	8.9	220	68
1933	31	188	6.1	145	57
1934	30	212	7.1	163	55
1935	29	204	7.0	154	51
1936	31	196	6.3	164	51
1937	35	176	5.0	137	50
1938	32	200	6.3	160	52
1939	34	207	6.1	161	48
1940	37	489	13.2	371	85

about 50, and the average for the past 12 years has been over 50 institutions.[8]

Table VII indicates the institutions which granted the bachelor's degree to students who later prepared theses for the doctor's. The showing here is most surprising, especially in the position of several smaller colleges. Although Illinois was ninth in the earlier period, it heads the list, a position held by Wisconsin for the period 1904-1928. State universities, in general, stand much higher in this listing than in Table I, which indicates the more important institutions giving work leading to the degree of doctor in economics.

The only type of information which has been collected for the period

[8] The figure of 85 for 1940 must be discounted to some extent because, as previously noted, the 1940 figure has not had the duplicates removed as was true for all other years.

1929-1940 which was not collected in the previous study of the period 1904-1928 is the distribution of the candidates for the doctoral degree in economics according to sex. Table VIII indicates that of the 2811 candidates included in the 1929-1940 period, 225 or 8 per cent were

TABLE VII—INSTITUTIONS GRANTING BACHELORS' DEGREES TO DOCTORAL CANDIDATES, 1929–40

Institution	Number	Institution	Number	Institution	Number
Illinois	108	Texas University	36	North Carolina	17
Pennsylvania	88	New York C.C.	35		
Chicago	76	Nebraska	32	Total	1365
Harvard	76	Northwestern	30		
Columbia	72	Princeton	30	Others	1252
Minnesota	64	Amherst	25		
Wisconsin	63	Stanford	25	Total	2617
California	61	Dartmouth	24		
Cornell	52	Kansas	23	*Foreign Countries*	
Ohio State	51	Yale	23	Canada	124
Washington U.	46	Colorado	21	England	12
Michigan	45	Penn State	20	China	19
Missouri	42	Pittsburgh	18	Japan	7
Iowa	37	Johns Hopkins	17	Others	32
New York Univ.	37	Beloit	17		
Oberlin	37	Kentucky	17	Total	194
				GRAND TOTAL	2811

women.[9] There has been no great variation in the distribution of men and women candidates for the various years.

It was pointed out in the beginning that the numbers dealt with here are the *candidates* which the various institutions reported as *working*

TABLE VIII—NUMBER OF MEN AND WOMEN AMONG DOCTORAL CANDIDATES, 1929–40

Year	Men	Women	Total	Year	Men	Women	Total
1929	195	29	224	1936	182	14	196
1930	223	19	242	1937	155	21	176
1931	204	10	214	1938	183	17	200
1932	245	14	259	1939	189	18	207
1933	174	14	188	1940	457	32	489
1934	198	14	212				
1935	181	23	204	TOTAL	2586	225	2811

toward their doctoral degrees. The annual lists do not indicate the number of degrees actually conferred. As a supplement to the study of these annual lists, 15 of the leading institutions were asked for the number of degrees they actually conferred between the year 1929 and

[9] The classification of candidates according to sex had to be made on the basis of their first names. It is possible that in a few cases the classification is wrong.

1939, inclusive.[10] Table IX shows the number of candidates which appeared on the annual list, together with the number of degrees actually granted by the 15 leading institutions. The 15 institutions reported 1859 candidates during this 11-year period and 1014 degrees conferred. The variation between the figures reported by the different institutions is very great. In two cases—Cornell and California—the number of degrees conferred exceeds the number of candidates listed. In several

TABLE IX—DOCTORAL DEGREES GRANTED COMPARED WITH CANDIDATES 1929–39
(by 15 Leading Institutions)

Institution	Number of candidates listed	Degrees conferred		Institution	Number of candidates listed	Degrees conferred	
		Number	Percentage			Number	Percentage
Columbia	350	104	28.27	Ohio	83	23	27.71
Chicago	269	52	19.33	California	69	78	113.04
Wisconsin	185	99	53.51	Northwestern	60	23	33.33
Harvard	222	176	79.27	Yale	59	28	47.45
Pennsylvania	119	67	56.30	J. Hopkins	54	42	77.77
Illinois	101	98	97.02	Michigan	47	26	55.31
Cornell	100	125	125.00	Princeton	39	27	69.23
Minnesota	92	49	53.26				

other cases the numbers are approximately equal, while in a few cases the number of degrees conferred represents only a fraction of the number of candidates reported on the annual lists. The comparison suggests considerable defects in the reporting of candidates.

[10] The year 1940 was not included because the candidates' list for that year was not comparable with previous years.

COMMUNICATIONS

Saving and Investment: Dynamic Aspects

It is with some hesitation that the writer brings up one of the controversies of economics which seems, of late, to have entered a quiescent stage. After a six-year mêlée, the conceptual difficulties presented in Mr. Keynes's *General Theory* seem no longer seriously to deter the monetary theorist. A continual struggle may yet be seen, however, on the part of many writers in adapting Mr. Keynes's essentially static terminology to a causal analysis. Mr. Robertson finds that Mr. Keynes, himself, is ill at ease in his new clothes, and the contortions of lesser writers are certainly apparent. It is hoped that this note may clarify a set of concepts which are still occasionally handled in such a way as to obscure the applicability of "pure theory" to the real world.

The difficulties seem to arise from a verbal and logical conflict engendered in trying to reconcile the irrefutable fact that, *ex definitione,* saving equals investment at every moment in time, with the basic conclusion that income changes mainly in response to changes in investment. Thus we have the anomaly of writers who ascribe deflation to "oversavings" while making use of a terminology which would necessitate the conclusion that the economy was simultaneously suffering from "overinvestment." Similarly, many writers imply that saving and investment might be unequal, were it not for national income which is quick to adjust itself to that level at which they will, by a happy conjunction of psychological circumstances, again be equal. But by definition, equality is *insured* at any level of income.

This confusion may be clarified by considering the twofold aspect of both saving and investment; that is, *designed* and *undesigned.* Total saving always equals total investment, but this is not true of their respective components. Thus, for example, if designed investment outlays exceed designed saving flows, total equality is maintained at each instant by additional undesigned saving; that is, unplanned excesses of income over consumption. This might take the form of unexpected holdings of cash (the converse of the income payments which constitute the increased investment), or of windfall profits. Or, if designed saving rises by, let us say, a sudden increase in the purchase of life insurance premiums, investment will also increase, but in the *undesigned* form of unsold stocks of goods, while the increase in *net* saving will be tempered by undesigned dissaving (losses) incurred because of the increase in thrift. As these repercussions change enterpreneurs' expectations, operations will be curtailed and designed investment outlays will also be reduced. As this in turn lowers income, either (1) designed saving will also fall (individuals will cease to buy insurance); or (2) designed saving will remain high and undesigned investment (unsold stocks) will rise (further aggravat-

ing the fall in income via expectations); or (3) undesigned dissaving (losses) will offset the aggregate savings total; or (4) a fortuitous increase in the marginal efficiency of capital will raise designed investment outlays sufficiently to absorb the increased saving. If the national income falls, it will continue to do so until the components of saving and investment are so modified that designed investment exceeds (or at least equals) designed saving.[1]

However, designed saving and designed investment are not *necessarily* equated by these shifts in income. The designed investment function and the designed saving function may be so shaped that they never equal each other, at *any* national income, although this is most unlikely. Their relative positions will determine the direction of the fluctuations in income. But at each moment, undesigned investment and undesigned saving will be exactly that amount needed to "equate" saving and investment.

In equilibrium, or more concretely, in conditions of a stable national income we can expect the designed expenditures on investment to be just sufficient to absorb the designed flows of saving. When a disequilibrant, such as a change in the marginal efficiency of capital or in the propensity to consume, directly affects the size of one of the designed flows, equality will be maintained by concomitant undesigned increments in either or both accumulation streams. Over successive periods of time, as the excess of one "dynamic" factor influences the size of national income, the new economic environment will change the designed components of the two flows until, at a subsequent income level (if equilibrium is established there), the designed flows will again equate.

Economists employing Keynesian terminology, who find that oversaving forces the economy to lower levels of national income, should make clear that they mean that designed saving exceeds designed investment; thereby reducing consumption expenditures and so income. In a formal sense the economy *is* suffering from overinvestment, but this takes the form of unsold stocks of goods, and is a residual undesigned component of investment. By unfavorably influencing expectations, such unwanted accumulations of inventory further the process of deflation.

Likewise, writers who stress the shifts in the level of income as the variable which equates saving and investment should take pains to indicate that it is the designed flows that are so equated, but that the undesigned complements maintain the definitional equation at all times during the transition from one point of equilibrium to another.

This division of saving and investment into purposive and residual categories is both an aid in presenting the levers of the cycle, and a conceptual help in understanding how a changing national income "makes" saving equal investment when, by definition, they always equate.

Robert L. Heilbroner

Washington, D.C.

[1] Designed saving and investment are not quite identical with Ohlin's ex ante concepts. His terminology refers to planned (*i.e.*, anticipatory) saving or investments; mine, to current planned (*i.e.*, purposive) activity.

Ezekiel's Analysis of Saving, Consumption, and Investment

In the March and June, 1942, issues of this *Review*[1] Mordecai Ezekiel presented the results of a rather comprehensive statistical investigation of saving, consumption, and investment. For the most part the paper is devoted to the relations of saving, consumption, and investment to income, and a comparison between saving and "private" investment, leading to estimates of the gap between saving and private investment at various future levels of income. This paper is in many respects a pioneer work in the field and, consequently, I think it is worth while to present a number of critical remarks. In the following discussion, I shall summarize a few of the important parts of Mr. Ezekiel's analysis which present difficulties or seem to need qualification. However, the comments that follow are not intended to be exhaustive.

The Functional Relation of Saving and National Income

1. Mr. Ezekiel uses as his measure of saving the familiar total "offsets to saving" series, covering such items as equipment, plant, housing, consumers' credit, net foreign balance, inventories, and government net contribution. In relating the total offsets series to income, Mr. Ezekiel implies that the relationship of such saving to income in the past permits an estimation of the potential saving associated with such income in the future, making the necessary *ceteris paribus* assumptions. Total offsets, however, are by definition equal to total investment and could be assumed to determine income rather than be determined by it. The fact that a certain saving in the past was associated with a given income may mean that a particular level of income in the past accompanied a particular level of investment and may give little insight into individuals' propensities to save a certain portion of their expected income.

2. The use of the total offsets series to measure saving implies a definition of saving which should be pointed out explicitly. Total offsets are theoretically equal to the saving of individuals and business *plus* the net change in consumer credit, where the saving of individuals and business is defined as income after taxes less consumption, and purchases of consumers' durable goods other than houses are considered as consumption expenditures. Now in the type of analysis attempted by Mr. Ezekiel it is almost essential to consider separately the saving of individuals and of business and to break down even such saving into its components, since otherwise the results can easily be misleading. Even if it is decided, however, that for lack of satisfactory data the analysis of saving has to be confined to the total of private saving, I am inclined to doubt that the appropriate series consists of total offsets including the net change in consumer credit. This series does not represent any real saving which has actually taken place, since total offsets excluding the net change in consumer credit are conceptually equivalent to the total of individual and business saving, each of which already reflects the change in consumer credit. It may be appropriate to use total offsets including the net change in consumer credit

[1] "Statistical Investigations of Saving, Consumption, and Investment," Pt. I, Vol. XXXII (Mar., 1942), pp. 22-49; Pt. II (June, 1942), pp. 272-307.

as a measure of income-producing or income-stimulating expenditures, but it does not seem valid to consider such offsets as a measure of saving.

3. The relationship between saving and income obtained by Mr. Ezekiel has one element of novelty which merits comment, namely, the appearance of a parabolic trend in the propensity to save (or to consume), after allowing for the effect of income and change in income. This is a surprising trend and, to the extent that it is meaningful, accounts for a variation of as much as four billion dollars in saving between different years of the same income and change in income. It is difficult to see the *a priori* explanation of such a trend. Mr. Ezekiel suggests that, in view of the "similarities of movement" between the saving and housing trends, "differences in the phase of the housing cycle may influence the levels of saving and consumption as well of investment. The way new housing is financed largely by sale to individual families upon the amortization plan may mean that purchase of a home puts increased pressure on a family to save even with no change in income level."

I should like to comment, first, that the movements are not particularly similar and, in any case, that housing is included in the saving as well as the investment statistics, so that some points of similarity between the two series would be almost inevitable. More important, using the direct estimates of individuals' saving made by the Securities and Exchange Commission, or the indirect estimates by Simon Kuznets or the Department of Commerce, there is no evidence of any parabolic trend.[2]

Consequently, I think it might be concluded that the parabolic trend mentioned above is more a statistical curiosity than an economic phenomenon with a plausible *a priori* explanation. It may arise in part from errors in the series used and partly from deficiencies in the statistical analysis.[3] In the latter connection, it should be mentioned that Mr. Ezekiel has lowered the levels of statistical significance (in terms of probability) from the usually accepted .05 or .01, admittedly arbitrary, to .20 and even lower. Thus a significance level of .20 for the trend in the relation between saving and income is taken to represent a "significant" relation. This is "corroborated" in part by a significance level of roughly .14 for the trend in the relation between consumption and income (though the data for saving and consumption are far from independent). Yet the danger in accepting so low a level of statistical significance is suggested by the fact that, using deflated (*i.e.*, constant prices) per capita figures in the relation between consumption and income, not only is the trend not significant but the closeness of fit including trend is actually slightly lower than the fit omitting trend.

The Functional Relation of Investment and National Income

4. In determining the apparent investment-income relation for the past two decades, Mr. Ezekiel obtains a very close curvilinear regression between

[2] Similarly there is little indication of such a trend in the relationship between corporate saving and income.

[3] It must also be noted that combining the downward trend in the relationship of investment in plant and equipment to income and change in income and the upward trend in the relationship of the government net contribution to these two variables can likewise be considered to give the parabolic trend observed.

plant and equipment investment and gross national income, with a downward linear trend over time. He suggests that this downward trend results either from the decline in the rate of population growth or from changes in the cost or durability of machinery, reflecting better steels and better design and improvements in the efficiency of machine tools. It seems rather doubtful that the downward trend can be attributed to the decline in the rate of population growth over the past two decades since this period was characterized by only one real change in such growth, a sizeable decline in 1930 over the rate of increase of the twenties. It seems equally doubtful that the trend can be attributed to changes in the cost or durability of machinery since, when investment in plant and investment in equipment are related to income separately, only plant expenditures show a downward trend (and a curvilinear relation to income). Expenditures on equipment, which would be expected to be more affected by changes in the cost or durability of machinery, show no trend (and incidentally appear to be linearly related to income).

5. Changes in any of the relationships between the components of investment and income will, of course, ordinarily affect considerably the results of the analysis. This applies, of course, not only to the particular relationship investigated but also to the estimates of the gap between saving and private investment. This is particularly true of the correlation between housing investment and income. This relationship could be changed substantially without affecting the statistical reliability or logical credibility of the results. As Mr. Ezekiel points out, the slope of the net regression of housing investment on national income could be drawn considerably steeper with equal closeness of fit, but he does not make the further point, which should be emphasized, that any sizeable change in the slope would change substantially the results of his analysis.

6. The correlation which is used to represent the relationship between temporary investment, the remaining component of private investment, and change in national income also has certain questionable features which affect the reliability of the results. Thus it should be noted that income is not introduced into this correlation since it does not appear to be significant. However, what is termed temporary investment is simply the sum of two quite different components of investment, changes in business inventories and changes in consumer credit, each of which is significantly related to income as well as to change in income. Apparently when these two different components of investment are combined, the relationship of each to income is obscured. Here again the estimate of the gap is affected.

7. The relationship between quasi-investment and national income leaves much to be desired. On the basis of the complete set of relationships which Mr. Ezekiel posits, quasi-investment as indicated in the following section must be determined by income, change in income, and time (or rather the factors associated with time), making the necessary *ceteris paribus* assumptions. Conversely, income must be determined by quasi-investment, change in income and time, or, stated differently, by quasi-investment in the present and prior periods, and time. Yet, as Mr. Ezekiel points out, in 1937 and 1939, years of about the same national income, there was a variation of over three billion

dollars in the total of quasi-investment. Nor is this result unique. As a consequence, Mr. Ezekiel states that in the period subsequent to 1933, "Changes in national fiscal or defense policy, rather than the impersonal effect of economic conditions, have apparently been the controlling influence."

This is a very revealing statement in view of the fact that, in Mr. Ezekiel's comparison of the saving and private investment functions, he implicitly assumes that total saving, or total offsets to saving, and total private investment are independent of government fiscal policies (except in so far as income is affected). If total saving and total private investment were independent of government fiscal policy in this manner, the relation of quasi-investment to income similarly would have to be independent of government fiscal policy, an assumption which is not too plausible on *a priori* grounds and, as indicated above, is even more questionable on *a posteriori* grounds.[4]

Comparison of Saving and Private Investment Functions

8. In Mr. Ezekiel's comparison of the saving and the private investment functions, the gap between total saving and private investment is measured under static and dynamic conditions, at different income levels, and for various phases of the housing cycle. On this basis the size of the post-defense gap is estimated under a number of different assumptions. The relationship investigated, however, is not that between potential saving and potential investment, as Mr. Ezekiel implies (p. 273), but an *a posteriori* relationship between offsets to saving including and excluding the net foreign balance and the government net contribution. It seems to me not to be too meaningful to term one of these functions a saving and the other an investment function, to say nothing of the objections to considering them *potential* saving and investment functions.[5] Let us suppose that over a period of years the net foreign balance and the government net contribution were zero. Would it then be maintained that *potential* saving and investment were equal as they must be in such a setup?

Mr. Ezekiel has, in effect, simply segregated two components of offsets to saving, determined their average level in the past under given conditions (of income, etc.), and estimated on this basis their future level. What is done with net foreign balance and government net contribution might have been done as well with other offsets to saving, though it is true, of course, that there

[4] Another instructive exercise in determining the potential error in Mr. Ezekiel's attempt to forecast the gap between saving and investment at a high future level of income is furnished by comparing actual quasi-investment in 1929 and 1940, the high points of income in each of the two decades from 1921 to 1940, with the estimated quasi-investment obtained as the difference between estimated total offsets and estimated private investment. The differences between the actual and estimated quasi-investment in these two years depend on the method of estimation but are quite formidable in every case. It is not unreasonable to suppose that the differences would be even greater beyond the range of observed values.

[5] In a footnote to the discussion of additions to saving and temporary investment under dynamic conditions, Mr. Ezekiel points out the possibility that they both "represent merely two measurements of the same thing—first viewed as saving, and then as investment."

is a particular interest in the government net contribution. Thus, when Mr. Ezekiel says, referring to the twenties, that "the higher average level of income in that decade was maintained only through the aid of continuous quasi-investment, either public financing or net foreign balances from capital exports," he could almost equally well have attributed it to the other offsets.

9. Unfortunately Mr. Ezekiel does not anywhere give explicitly a complete model of the economic system which he is positing. Consequently, it is not clear what determines income in such a system or how the propensity, or propensities, to save enters into the relationships which he sets up; *viz.*, (1) Saving = Function_1 (Income, Change in Income, Time); (2) Private Investment = Function_2 (Income, Change in Income, Time); and, by definition, (3) Saving = Investment = Private Investment + Quasi-Investment. From (1) we could write (4) Income = Function_3 (Saving, Change in Income, Time) which in this particular case gives income for any period as a function of total saving in that period, total saving in previous periods, and of time. The last equation can be written more meaningfully as (5) Income = Function_3 (Investment, Change in Income, Time). From the above, we can also write (6) Income = Function_4 (Private Investment, Change in Income, Time), and (7) Income = Function_5 (Quasi-Investment, Change in Income, Time). It is far from obvious how income is determined from the above equations, or how changes in the propensity, or rather propensities, to save affect these relationships.

10. Finally, I should like to raise certain questions regarding Mr. Ezekiel's treatment of "Saving versus Investment under Stable Economic Conditions." Under such conditions saving in the post-war world is estimated as before (*i.e.*, as a function of income, change in income, and time) but investment is estimated, first, on the basis of the average ratio of investment to gross national product during the past two decades,[6] and, second, on the basis of a somewhat more sophisticated procedure, *viz.*, the correlation between the above ratio (investment divided by gross national product) and both the per cent increase in population and the per cent increase in real gross national product per capita for half-overlapping decades from 1879 to 1938. Now the ratio of investment to gross national product over a period of time may give some idea of the investment necessary to maintain a given level of gross national product, although it is obviously not too good even for that purpose. However, the average ratio over periods of prosperity and depression seems to furnish very little indication of the way entrepreneurs would react to the highest level of income in our history up to the period of the war, and the highest prolonged level of income ever achieved. In the past high levels of income have been accompanied by very high ratios of investment to income. It may be granted that this reflects an acceleration factor which would be absent in a post-war

[6] In effect, in this first relationship, but not in the second relationship, it is assumed that the housing cycle post-war will average as high as during the twenties. In the first relationship the average ratio of investment in plant and equipment during the past two decades is applied to the desired post-war income level of 110 billion dollars and then the average expenditure for housing during the twenties is added in. In the second relationship housing is combined with plant and equipment and the two are treated together.

world marked by a "stable" high level of income. Yet there is still little reason to believe that, confronted with such a "stable" high level of income, entrepreneurs' investment decisions in the aggregate will simply reproduce the investment "necessary" to maintain the desired national product.

Mr. Ezekiel's correlation analysis for the period 1879-1938 between the amount of investment in per cent of gross national product and both the per cent increase in population and the per cent increase in real gross national product seems to be subject to a number of deficiencies. The correlation of over .9 which is based on ten observations almost entirely disappears when the last two observations covering the periods 1924-1933 and 1929-1938 are omitted. As a matter of fact, while the partial correlation between the amount of investment in per cent of gross national product and the per cent increase in population remains positive, though becoming extremely small (+.132), the partial correlation with the per cent increase in real gross national product per capita actually becomes negative. Consequently, the correlation analysis for the period 1879-1938 is certainly suspect and the results can hardly be said to be "based on American experience over a long period of years."

More specifically, the results supposedly based on the extended period 1879-1938 seem to reflect almost entirely the fact that during the depression of the early thirties, investment in per cent of gross capital formation dropped drastically at the same time that there was a sizeable decrease in real gross national product per capita and a considerable decline in the per cent increase in population. In this connection it may be noted that the use of the per cent increase in real gross national product per capita as a measure of technological progress leaves much to be desired since this statistic measures (among other things) the degree of utilization of resources in addition to their efficiency. Thus, in the early thirties the low level of utilization of resources was a more potent factor than any technological retrogression making for a decrease in real gross national product per capita. Yet on the basis of what happened in the thirties, as reflected in the correlation analysis mentioned above, Mr. Ezekiel estimates the future requirements for capital formation assuming a stable high level of income and an assumed average rate of technological progress (and population growth).[7] This certainly is a questionable procedure.

Summary

In the preceding discussion I have pointed out briefly certain theoretical and empirical objections to Mr. Ezekiel's analysis of saving and investment which he utilizes to estimate the magnitude of the post-war gap under specified conditions. I have indicated that the theoretical structure behind these statistical relationships appears rather suspect and that the relationships themselves do not always measure what they purport to measure. I have also attempted to show certain deficiencies in the statistical analysis of saving and

[7] It should be mentioned that Mr. Ezekiel compares the 18 1/3 billion dollars of gross capital formation, estimated on the basis of the above to accompany a stable level of 110 billion dollars of income, with the private investment of 17 billion dollars estimated on the basis of the simpler approach previously discussed though, among other differences, the prior approach assumes the high phase of the building cycle characterizing the twenties.

investment, which, totally apart from theoretical reasoning, would affect very substantially both the estimates of "saving" and investment accompanying given levels of income and the resulting estimates of the post-war gap.

These comments are not exhaustive and they hardly touch upon such matters as deficiencies in the basic series used by Mr. Ezekiel or on the well-known technical limitations which characterize all such statistical analyses: *viz.*, serial correlation, high correlation between independent variables, extrapolation beyond the range of observed values, and similar technical matters.

IRWIN FRIEND

Philadelphia

Saving of Individuals in Relation to Income

In a recent article,[1] Mordecai Ezekiel raised the interesting question as to whether individuals in this country tend to persist in habits of consumption spending; that is, whether during years of decreasing income they tend to spend more and to save less in relation to their income than during years of increasing income. Partly to answer this question, Ezekiel made two analyses, one of data on private saving and the other of data on consumption. Unfortunately, both analyses include serious errors of data or of interpretation, as we shall briefly point out.

1. *Functional Relation of Saving and Income.* By an oversight, the values for saving (total offsets to saving, according to the Currie definition) as given by Ezekiel in his Tables I and II and also as plotted in his Figures 2 to 5 are all erroneous for the years 1929-40 because they omit the net contributions of the state and local governments. The omitted amounts varied from 1.4 billion dollars in 1931 to minus 1.2 billion dollars in 1934. The corrected values are plotted in Figure 1.[2] Comparison with Ezekiel's corresponding Figure 5 shows that the corrected points for the seven depression years 1930-36 lie only about half as far, on the average, from the trend line drawn symmetrically through them.

2. *Functional Relation of Consumption and Income.* In his Figures 8 and 9 Ezekiel plots consumption as a function of net national income whereas he should have used gross private income as in his Figures 4 and 5. Estimates of consumption are obtained by subtracting estimates of saving from estimates of income; hence, a plot of consumption *vs.* income is also a plot of saving *vs.* income; and the choice of income used determines the kind of saving plotted. As a result of Ezekiel's choice of net national income, his Figures 8 and 9 and his corresponding equation really relate to net total saving, including government net saving, instead of to private saving; hence, no conclusion as to spending habits can be drawn from this analysis.

3. *Saving of Individuals, 1929-40.* The figures for saving used by Ezekiel all include the saving of corporations; yet to obtain information as to the

[1] "Statistical Investigations of Saving, Consumption, and Investment," Pt. I, *Am. Econ. Rev.*, Vol. XXXII (Mar., 1942), pp. 22-49.

[2] The values will be furnished by the writer on request.

spending habits of individuals, it would, of course, be preferable to secure data as to their saving as a separate group. It happens that Gilbert and Bangs of the Department of Commerce have recently published[3] new estimates of the saving of individuals (which they call noncorporate gross savings) and also of consumption (which they call consumer expenditures for goods and services).

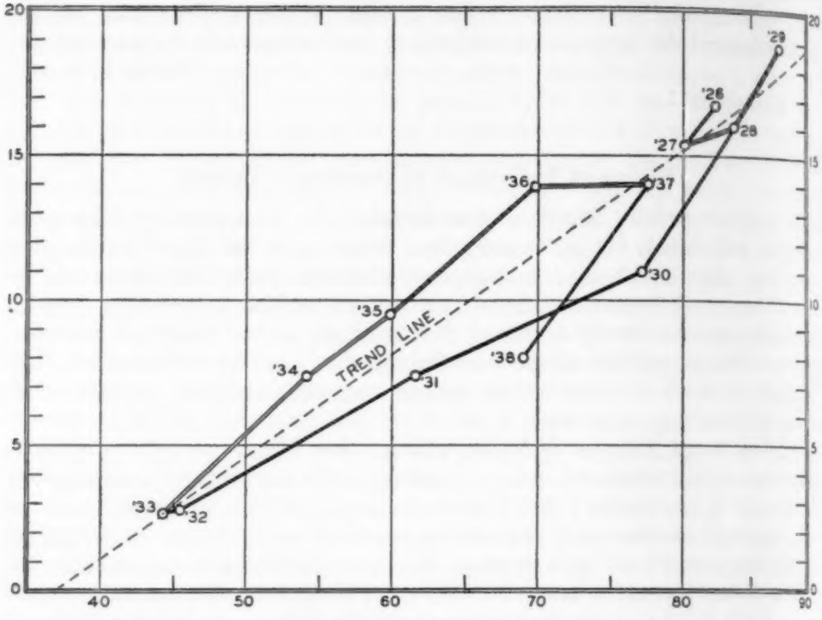


FIG. 1—Private Saving as a Function of Private Income (Currie definitions); Ezekiel's Figures, Corrected.

ices). By adding these estimates together we obtain the Commerce estimates of individual disposable income given in the table on page 836. A plot of these Commerce estimates of individual saving as a function of disposable income is given in Figure 2. Comparison of this figure with Figure 1 shows marked differences. It is of particular interest that in Figure 2 the points for 1931 and 1932 lie above the points for 1933 to 1935 instead of below, indicating a persistence in habits of saving rather than in habits of consumption spending.

The differences between Figures 1 and 2 are due not so much to the fact that corporate saving is included in Figure 1 as to a difference in the definitions of individual saving used. The Currie definition of saving, used in Figure 1, includes increase in outstanding consumer credit whereas the Commerce definition, used in Figure 2, does not. If we add the consumer credit term, as given in the table, to the Commerce estimates of individual saving, we obtain

[3] Milton Gilbert and R. B. Bangs, "Preliminary Estimates of Gross National Product, 1929-41," *Survey of Current Business*, May, 1942, p. 12.

INDIVIDUAL SAVING AND DISPOSABLE INCOME
(in billion dollars)

Year	Individual Disposable Income		Individual Saving			Consumer Credit: Nugent data
			Without Cons. Credit		With Credit	
	Commerce data	NBER data	Commerce data	NBER data	Commerce data	
1929	82.3	80.8	11.5	9.2	12.3	0.8
1930	74.0	73.5	9.1	5.5	8.3	−0.8
1931	62.8	61.0	8.6	5.2	7.4	−1.2
1932	48.5	47.3	5.5	3.6	4.0	−1.5
1933	46.9	45.1	4.1	2.5	4.1	0.0
1934	53.3	52.4	5.6	3.5	6.2	0.6
1935	58.6	56.8	6.4	6.7	7.4	1.0
1936	67.9	63.5	8.8	10.6	10.2	1.4
1937	71.6	67.9	9.1	9.9	9.9	0.8
1938	65.7	62.4	7.2	6.4	5.7	−1.5
1939	70.6		8.6		9.4	0.8
1940	76.1		9.9		10.8	0.9

the values in Column 6 of the table. These values are plotted in Figure 3. Comparison with Figure 2 shows that inclusion of the consumer credit term inverts the relative position of the points for the years of decreasing income, 1931-32, with reference to those for the years of increasing income, 1934-36,

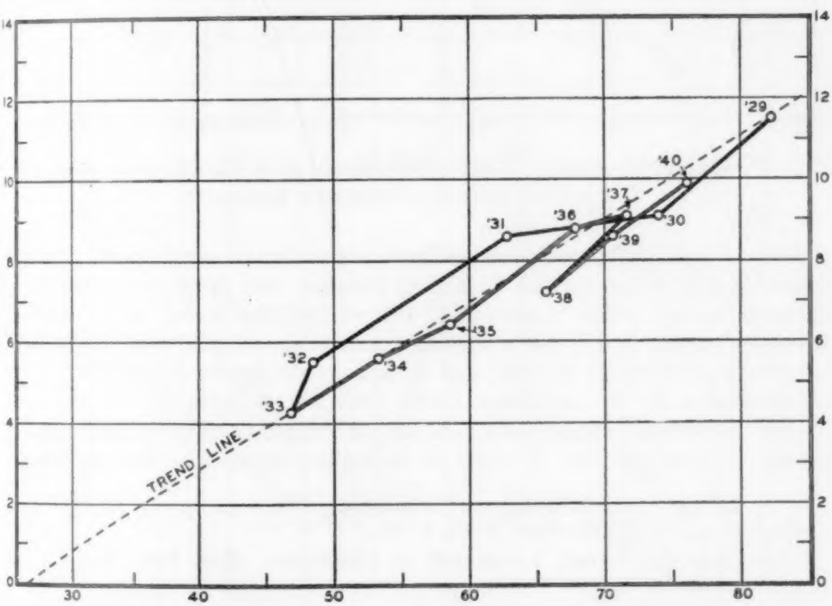


FIG. 2—Individual Saving as a Function of Individual Disposable Income (Commerce definitions); Commerce Estimates, 1942.

so that Figure 3 indicates persistence in habits of consumption spending instead of in habits of saving. Evidently the conclusion to be drawn from the Commerce estimates depends on which definition of individual saving we adopt. As explained in a previous article,[4] the consumer credit term is only apparent saving, saving from the point of view of the consumer, not from that of the economy. The National Bureau of Economic Research,[5] as well as the Department of Commerce, omits this term.

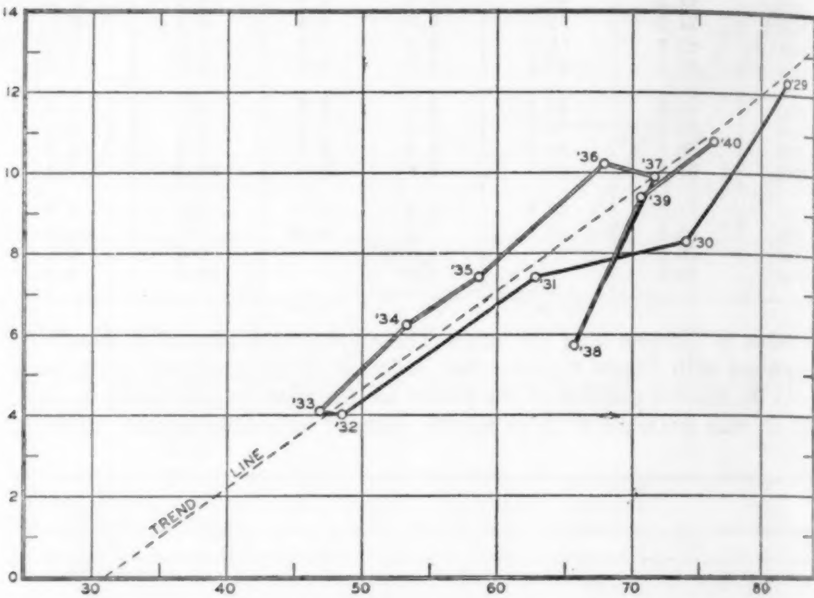


FIG. 3—Individual Saving (Currie definition) as a Function of Individual Disposable Income; Commerce Estimates.

Nugent gives a plot[6] which shows that outstanding consumer credit (capital financing plus income-period financing) increases and decreases in step with national income, which is natural. It follows that the *change* in outstanding consumer credit, that is the consumer credit term, should vary in step with the *change* in national income; and in fact, as the figures in the table show, the estimates for the consumer credit term are negative for the years of decreasing national income and positive for the years of increasing national income. This means that, in years of decreasing national income, instalment

[4] G. S. Fulcher, "Annual Saving and Underspending of the Individuals, 1926-37," *Rev. of Econ. Stat.*, Vol. XXIII (Feb., 1941), p. 40.

[5] Simon Kuznets, *National Income and Its Composition* (New York: Nat. Bur. of Econ. Research, 1941), p. 69.

[6] Rolf Nugent, *Consumer Credit and Economic Stability* (Russell Sage Foundation, 1939), Chart 3, p. 125.

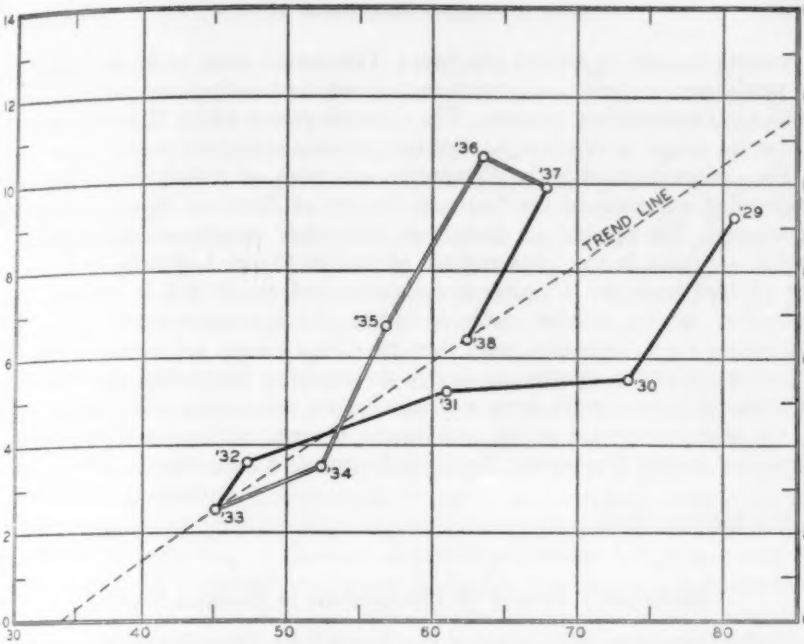


FIG. 4—Individual Saving as a Function of Individual Disposable Income (Commerce definitions); National Bureau of Economics Estimates.

FIG. 5—Individual Saving 1929-40, without Consumer Credit Term.

payments exceed instalment purchases. This would seem to be an indication of persistence in habits of paying instalment debt obligations rather than in habits of consumption spending. The dynamic factor which Ezekiel's analysis of saving seems to disclose is, therefore, merely consumer credit.

For comparison with the Commerce estimates of individual saving, corresponding estimates of the National Bureau of Economic Research may be of interest. The results[7] for individual disposable income and for individual saving are given in the table and are plotted in Figure 4. Finally in Figure 5 are plotted both the Commerce estimates and the N.B.E.R. estimates of individual saving, neither series including the consumer credit term. The differences are so large that, until they have been greatly reduced or explained, it seems useless to attempt to derive an equation for saving as a function of national income or to draw any conclusions other than such general ones as the relation between saving and income brought out by Currie's estimates presented to the Temporary National Economic Committee in 1939.

GORDON S. FULCHER

Washington, D.C.

Buchanan's Theory of Fluctuations in Business Profits

In the December, 1941, issue of the *Review*[1] Professor Buchanan proposed a "general theory" which accounts for fluctuations in business profits in flexibilities in demand and price as they affect gross income, and the degree of proportional variation of expenses relative to this income. Of prime importance in the explanation of the failure of expenses to vary proportionately with gross income are the arbitrary and illogical accounting methods of the rule of "cost or market whichever is lower" for inventory valuation and the straight-line method of depreciation. Because of this fact, he says, it is time to reëxamine these accounting techniques of the individual concern because of the adverse effect which they have on the total economy.

Both of these accounting techniques, according to Professor Buchanan, augment profits in prosperous years and diminish them in poor ones. It is generally true that in the case where market values at the end of the year are less than cost, accountants may allow, and perhaps erroneously, an external factor of price fluctuation to affect the cost of goods sold, and this practice may accentuate the fluctuation in business profit for that year.[2] The net effect on the profit for a particular year depends, of course, upon whether the beginning inventory was taken at cost or at market prices. Accountants will not, however, understand or agree with his statement that the rule of the "lower of cost or market" augments profits in periods of rising prices (p. 738).

[7] Details of the calculations, based largely on Kuznets, *op. cit.*, will be furnished by the writer on request.

[1] N. S. Buchanan, "Toward a Theory of Fluctuations in Business Profits," *Am. Econ. Rev.*, Vol. XXXI (Dec., 1941), pp. 731-53.

[2] This external factor of price fluctuation could easily be kept out of the regular operations by the use of a valuation account and the treatment of the loss as a non-operating item.

I take his statement to mean that if market values are higher than cost at the end of a certain year, and if the inventory is taken at cost, this profit is actually reflected in the next year's operations. What actually takes place is the postponement of the time for taking the profit until the next year when the goods are sold and the profit is realized. If a certain grocer, for example, found at the end of 1941 that the actual market value of his goods was $100,000 more than cost, profits would not be augmented by placing the profit in 1942 rather than in 1941. If prices rise over a number of years, there is a lag in the effect of these prices on reported profits. If prices are higher than cost at the beginning of the year, and there is a sudden decline during the year, and inventory is taken at market rather than cost at the end of the year, the effect on profits for the year is less than the actual change in market prices which has taken place. In such instances, the conservative rule might even tend to distribute or soften the effect of price fluctuations. If prices decline for a long period of years, except for the first year the relative effect of the rule is in proportion to the change in the price level but not more.[3]

The fundamental question with regard to fixed expense is whether or not costs do vary according to the rate at which a business is operated with a certain amount of plant and equipment. If the life of a machine is determined by the number of units which it will produce or by the labor hours, and production varies between periods, then the straight-line method should not be used. The case is not so clear when time rather than use is the decisive factor. Due to obsolescence a machine might have a life of only five years regardless of the volume of production. Depreciation of this kind is not related indirectly to either the gross or net income. Furthermore, gross income for future years is too often affected by unpredictable factors entirely external to the business. Depreciation is only one of many expenses which may have this character. It might be safer to use convenient and perhaps crude methods rather than to attempt to defer such expenses as interest on indebtedness, rentals, or management salaries into later years because, let us say, prices are falling and income is declining. As I see it, economic theory supports rather than contradicts this idea that some expenses of a firm are relatively fixed.

The variables selected and an analysis only in terms of current dollars seem to obscure many important factors in what may be called a "general theory" of cyclical fluctuations.[4] We are satisfied that gross income does vary widely between industries, but the term "flexibility of demand" does not tell us much more than this.[5] Maybe some of this variation is somehow bound up with that imp "product differentiation." Then, too, when there are inflationary tendencies, the dollars of business profits may not prove to be "real" dollars

[3] I do not attempt to defend the strict logic of taking estimated losses, but not estimated gains. Also, not all the accountants agree to this rule as an acceptable valuation basis. See Paton, *Advanced Accounting* (New York, 1941), p. 154.

[4] Note the many factors listed by R. T. Bowman in his *A Statistical Study of Profits* (Philadelphia, 1934), as trade marks, monopolistic control, lucky orders, geographic locations, and many others. P. 18.

[5] The "income elasticities" include changes in price as well as income received: Buchanan, *Am. Econ. Rev.*, Vol. XXXI, p. 741.

at all. Surely the whole question of the effect of fixed expenses is greatly magnified by large changes in the price level. In times of depression a company may find itself burdened with a vast plant built at high prices and at high costs, and the question of devaluation, not of a method of computing depreciation, becomes fundamental to the life of the business. Receiverships are necessary in some cases because of high rental contracts. The quest for cyclical forces in the accumulation of stocks, lag of costs and prices, output and life of producers' goods, interest rates, and monetary phenomena is the work of many specialists and needs no elaboration here.

Recorded profits influence business men not only on account of their fluctuations, but also on account of the fact that they are generally overstated. I have always thought that the economist's approach to this problem of accounting profits would be that of casting out those elements which are not profits at all. Except in the case of monopoly elements and temporary conditions, perhaps a relatively small amount would be left if there were something approaching a stable price level, and this curious mixture called "business profits" could be properly analyzed and proper allowance could be made for interest on owner's capital, rents, management salaries, and other costs. This approach, it seems, is more in accord with our general body of economic theory than one which depends for its remedial effects upon the fact that the concept of fixed expense is erroneous.

LAWRENCE R. CHENAULT

Hunter College

Price Control and Rationing

Certain of the recent contributors to the *Review* writing on price control and rationing have ignored what seems to be the most important question of all. Most people concede that the present war will be in part decided by the relative economic efficiency of Germany and the United States. Hence the ultimate criterion of any program for freezing prices and rationing commodities should be its contribution to economic efficiency as judged by wartime needs; *i.e.*, the satisfaction of only the most essential needs of every family or person with a minimum expenditure of resources retained from the war effort. Compared with this it is immaterial if the *prices* of goods rise or fall.

The Administration presumably has no trust in the allocating efficiency of the price system in time of war because of the considerable income inequalities which exist amongst consumers and because contracts based on costs prevent material prices acting as rationers amongst defense firms. The increasingly favored alternative is to distribute agents and final products by direct action methods and to freeze the devitalized prices according to popular dictates. Failing supplies of essential products will then be subsidized.

This cure may be worse than the ailment. The labor cost of bureaucratic allocation is considerable for all concerned. It would be an overly complicated rationing scheme which would ensure the marginal employment of all scarce consumption goods being of equal importance. Obviously, this goal will never

be attained by the granting of equal quantity allowances of scarce commodities because special climatic, occupational, and personal factors render each family's needs peculiar. For this same reason a person can obtain more enjoyment from the unregulated command over a specific value of money and his country's resources than if his claims have to be exercised in some "average" way prescribed by the government. Consequently, taking the nation as a whole, an excessive quantity of productive resources will be lost to the war effort, however low the official standard of living falls. Finally, the granting of a subsidy violates the economic (but not the political) rationale of the price ceiling.

Fortunately the possibilities are not limited to either *laissez-faire* or present and prospective controls of the O.P.A. type. Price changes can be made an ally instead of an outlaw, for shifts in production and consumption can be instigated by altering price relations. Value rations can be used instead of, and are preferable to, commodity rations, because they permit more variation in sumptuary behavior. And if these value rations are lumped into an expenditure allowance, a maximum of flexibility is attained. This effect might be had by means of income taxation, compulsory bond buying, or sales of ration coupons. Over-all controls of this kind, if technically and politically feasible, appear superior to the two other alternatives.

"Practical" administrators in Washington may shrug off these ideas as "classroom theory" and point out that Germany has had a price ceiling since the middle thirties. This reference should injure rather than succor their argument. Professor Singer's articles on the German economy (*vide* the *Economic Journal*) give us fair warning of the confusion and waste attendant on this prolonged usurpation of price functions by the bureaucracy of even a totalitarian state.

STEPHEN ENKE

University of California

BOOK REVIEWS

Economic Theory; General Works

The Theory of Competitive Price. By GEORGE J. STIGLER. (New York: Macmillan. 1942. Pp. vi, 197. $3.00.)

"This is a preliminary edition of a textbook in advanced economic theory. . . . The present volume covers the usual introductory material on methodology and the theory of competition" which the author soon hopes to supplement by sections on "imperfect competition, multiple products, capital theory and certain other topics" (Preface).

Of late, several textbooks have appeared, wholly or mainly on economic theory, which display encouraging improvement in quality. Among them Professor Stigler's *Theory of Competitive Price* is entitled to a prominent place. His material, though he may feel it to be "unoriginal," is certainly not trite. His crisp presentation is sure to hold the interest of the reader and to clear up for the beginner many difficulties which with less efficient teaching he might never overcome at all. A commendable attention to rigorous formulation is wisely tempered with a due regard for the disabilities of that large number of students of economics who so far have not reconciled themselves to the fact that, though the mathematical equipment required for an adequate grasp of the subject is as yet modest, it is hardly possible to do without any.

I wonder why Stigler calls his book "advanced." Recent refinements are hardly hinted at, and practically everything the modern theorist worries about is conspicuous by absence. It is as an introduction on an elementary level that the book has few, if any, peers—as a text, say, for the undergraduate course in theory that follows directly upon the general introductory course in economics (such as Harvard's "Ec. A"). In fact I do not see why the book should not be used for the theoretical parts of the latter: the intellectual effort it calls for is much below that required, at the comparable stage, from the student of theoretical physics, and very few adjustments would suffice to fit it for the task.[1]

So good a performance invites a kind of criticism which a lesser performance is in no danger of meeting and the import of which may easily be misunderstood. I wish to emphasize therefore that my high opinion of the book is entirely unaffected by the comments I am about to make. It is, in fact, precisely that high opinion and my wish to see the book widely used in the future that prompt me to make them.

[1] Some of these adjustments are necessary in any case. The text indicates that it was composed in something of a hurry, and there are many little carelessness in it that a modest amount of additional work could eliminate.

In the first part—Introductory—the fourth chapter deserves particular commendation on pedagogical grounds. The analytic tools which we are in the habit of calling "theory" are formally so similar to one another that it is obviously convenient to display this fact from the outset. This Professor Stigler does, following the example set by Mrs. Robinson, in an extremely adroit manner: the tiro learns right away all he needs to know about total, average, marginal quantities, elasticities, and so on, so that free use can be made of them, and the formal relations between them, later on. The rest of the first part I feel less able to admire, both on account of what I found in it, and of what I failed to find.

I do not know that, at this hour of the day, there is any necessity for the general methodological considerations offered in the first chapter, or why, if we *must* define our field, we should choose a definition which makes strategy a part of economic theory—scarce means, competing ends, maximum of results. Would it not be more enlightened to warn the beginner that the term economic theory covers two different things: models or schemes that are devised for the purpose of clearing up certain points about the pure logic of economic relations—such as necessary and sufficient maximum-minimum conditions—which cannot, or can only with difficulty, be applied to statistical facts; and models or schemes that are precisely devised for the purpose of dealing directly with statistical "regularities," such as the various Tinbergen models? And would it not be well, also, to explain to the beginner—it can be done in a few pages—why and by what routes we have drifted so far away from the Marshall-Wicksell background that looked so satisfactory in 1900 and looks now like an old model-T Ford?

The treatment of Basic Concepts in the second chapter is still less satisfactory.[2] But I will merely suggest that there are better reasons than Professor Stigler seems to admit for defining Statics as the theory of the relations between economic quantities all of which refer to the same point of time, and Dynamics as the theory of the relations between economic quantities referring to different points of time.[3] It seems also desirable to impress upon the beginner's mind the all-important distinction between Statics and Dynamics, which are *methods* of approach, and Stationary and Evolutionary States of the *reality* we investigate. Keynes investigates evolutionary processes by means of a static theory. A stationary process may be analyzed by means of dynamic theory. The work that uses these categories has become too important to be passed by.

The second part, which justifies the title of the book, presents Professor Stigler's basic structure. As far as it goes, it is excellent. The theory of consumers' behavior or households' behavior—I should have preferred this designation of the material of chapters 5 and 6 to "theory of demand"—is entirely freed from survivals of the old utility analysis, and Stigler shows once more how well we can get along without it.[4] I will not, however, suppress a lingering

[2] In particular, it is, to say the least, misleading to make *complete* knowledge a requisite of perfect competition.

[3] This is meant to include also relations containing a time derivative. The above definition is due to Ragnar Frisch.

[4] Why, by the way, is it irrational to go on a spree? P. 66.

doubt as to whether indifference varieties are any more necessary. As Samuelson has shown (and before him, though less stringently, Barone), all we need in order to derive the proper restrictions on households' behavior is a consistency postulate: if I prefer a set of goods A to a set of goods B, I must not at the same time prefer B to A. However, gratitude greatly prevails over doubt when we peruse those chapters.

Then comes the production function (chaps. 7 and 8). It would be well, perhaps, if in later editions (of which I hope, and predict, there will be many) Professor Stigler could see his way to disentangling the discussion of its fundamental properties from the discussion of costs which he now carries on almost concurrently in a way that does not make for clearness. Of course Professor Stigler knows perfectly well how to "descend" from the production function to costs. The logical sequence could, however, stand out better than it does. The opportunity cost theory with which the argument starts would, moreover, greatly benefit from some additional care. Grasp of the distinction between a particular technique and a production function that covers many different techniques is not made any easier by the use of such phrases as "technique *i.e.* the production function" (p. 110), although Stigler dispels (p. 123) any suspicion that such phrases might create. The difficulty raised about the multiple-product production function (p. 110) is entirely imaginary and really amounts to a confusion between two different problems; and I can easily conceive of a more instructive treatment of the falling intervals of average-cost curves.

The ninth chapter—Pricing under Competition—might more purposefully converge toward some rendering of a modernized Walras system, and additional hints at problems of determinateness and stability might not be amiss. The last chapter—Pricing of Productive Services, and not, I am glad to say, "Theory of Distribution"—is a little sketchy. Moreover, it suffers particularly from the fact that, if the theorist wishes to open windows that look out on applied fields—and he is right in trying to do this—such glimpses are not likely to be very satisfactory in themselves. Thus, Stigler declares (p. 187) that the occupational and geographical distribution of workers is a subject on which the economist "has considerable to say" (*sic*). But what follows is hardly of a nature to bear out the expectation raised.

Nevertheless I repeat what I said before: Gratitude and, in places, admiration should prevail over criticism even as regards chapters 7-10. Two questions, however, remain which concern all of us who are teaching theory.

First, should a book or course of this kind start from the perfectly competitive case? Professor Stigler, fully aware of all that can be urged against this *modus procedendi,* makes a strong case for it. With due respect for the weight of his arguments I have to profess myself unconvinced. It is not only that it is bad tactics to do so.[5] Much more important, the com-

[5] It is bad tactics, that is, to use a road on which we do not get anything which we could not get from traveling on another but on which we encounter avoidable antagonism. The point may be illustrated by that unfortunate creation, economic man. There never was a more harmless chap, but why use him, since we do not need him and since the mere

petitive case—which, by the way, Professor Stigler invests with properties that are much too sweepingly formulated—is not a limiting case or norm that embodies the essentials of the working of capitalist society with only "deviations" or "frictions" left out. The deviations from the perfectly competitive schema are themselves of the essence of capitalism and the source of phenomena that would be completely absent in perfectly competitive conditions. Therefore, it is much better to start from imperfectly competitive situations. This carries the additional advantages that a large number of realistic patterns come naturally within the range of theory from the outset and that the proper place is created for the fascinating problem how far they eventually work out in similar ways. If Professor Stigler nevertheless desires to start from a schema of "ideal" resource allocation, I submit that a well-chosen type of socialism qualifies much better for the task. Proceeding on this line, the teacher would have plenty of opportunity for dispelling the naïve—and pernicious—idea that socialism and capitalism each mean just one definite thing that can be embodied in just one definite theoretical model.

Second, should a book or course of this kind really keep forever within the ivory tower of nonmonetary theory? Professor Stigler evidently believes that he is expounding what teachers of economic theory actually do expound. To shake this belief, I will tell him the answer I got from one of the most brilliant theorists in the country when I asked him what he did in his *theory* course: "Oh, I just feed them the Keynesian stuff!" In case Professor Stigler be shocked, I can assure him that so was I. But to "feed" one's class exclusively on Keynes is one thing, and to ignore the monetary—and aggregative—aspect almost completely is another thing. I have thought for some time that, if we agree in anything, we agree in holding that the fundamentals of the monetary mechanism should be introduced on the ground floor of *general* economic theory and that no adequate analytic apparatus can be constructed without them and without either Say's law, or something we may prefer to Say's law. This is not a mere matter of division of labor between texts or courses. So much should be clear from Walras.

Joseph A. Schumpeter

Harvard University

The Strength of Nations—A Study in Social Theory. By George Soule. (New York: Macmillan. 1942. Pp. 268. $2.50.)

In this work Mr. Soule endeavors to set forth a new basis for social science that will make it more fruitful in solving the pressing problems that confront our world. The book is a significant one which merits the attention of all social scientists—and particularly of economists, because it is with economics and economic matters that it is primarily concerned.

Impressed by the failure of our civilization to provide health, employment, and physical comfort for all the people, Soule believes that it is only through

sight of him makes some of our fellow economists boil with resentment? Professor Stigler rightly keeps away from him.

science that these failures can be overcome. The backwardness of the social sciences in solving these problems is due to the barriers which divide them into separate fields. There must be a synthetic approach, in which a science directed toward the attainment of social welfare will be built upon the foundation of the inorganic and organic sciences. This requires us to recast our conception of the human beings which constitute the basic units of society. Man is not (as the economists have pictured him) a hedonist in a milieu of atomistic competition, but a physical and biological organism existing in a cultural medium, and interacting therewith. Soule then proceeds to a description of human nature in terms of Freudian psychology, which he finds confirmed by physiologists' studies of man's nervous system and the reactions between physiological processes and nervous states. This approach leads naturally to an emphasis on neurotic disturbances caused by the frustrations of an unsatisfactory environment. So the task of social science is to find ways of providing an environment better suited to the emotional needs of human beings.

At this point Soule offers a bold and interesting suggestion that constitutes the heart of his theory, and represents his effort to synthesize inorganic, organic and social science. It is that the emotional and mental processes of man are manifestations of energy similar to heat, electricity, motion, and chemical change; hence, like these, they are subject to the first and second laws of thermodynamics, *viz.*, the principle of conservation of energy and the principle of dissipation of energy. The first of these principles is that energy can be changed from one form to another, but cannot be destroyed; the second is that, in practical uses of energy, some of it escapes and is wasted.

If human beings are characterized by these two principles, it follows that in social problems we are concerned with a process of transformation of energy and wastes or losses in that transformation. This has important practical applications. Since there is in modern society a surplus above the physical necessities of life, there is energy to spare which must somehow find expression. Activity is no longer primitive, unconsciously determined by biological forces; it becomes a matter of deliberate choice, involving purposes or goals. If social health is to be maintained, these goals must be appropriate to human needs, and harmonious with one another. Social science must recognize this, and must find ways of directing into appropriate channels the energy that is released by technical progress. For instance, it must show how the labor displaced by new mechanical inventions can be reëmployed.

This line of thought causes Soule to reject the view that science is not concerned with purposes or ends. In a world of surplus, where the only values are no longer survival values, the social scientist must reveal what are the basic emotional needs of human beings, and in what kind of culture these needs may be better fulfilled than they are at present. For instance, ways may be found for sublimating the aggressive instinct so that it will no longer lead to war; the need for social security can be satisfied; we can avoid frustration caused by the failure of our society to fulfill the promise of America as a land of plenty; and we can find out how to prevent "contagions of emotion," such as the "Nazi epidemic." In developing this phase of his argument,

Soule draws an effective analogy with medicine, which (he rightly observes) has not been any less scientific because it has concerned itself with the practical problems of health. Social science, he feels, should be directed similarly toward promoting the health of the social body. Social scientists should study institutions in the light of their fitness for performing useful functions, just as physicians study the organs of the body. Failure to do this is equivalent to abandoning the treatment of disease to the care of quacks and charlatans.

By way of illustrating his thesis, Soule makes a number of excursions into the field of economics. In a rapid survey of the history of economic thought, he appraises the several schools which have marked its development. Against the classical tradition he levies criticisms that show the influence of Veblen. He finds it tainted in its origins by a naïve belief in the beneficence of natural laws, hence biased in favor of the system of free enterprise; and he believes it to be hampered by the false view that society is atomistically composed of competing individuals who are actuated by hedonistic motives. Its shortcomings are revealed by its inability to account satisfactorily for such phenomena as the activities of speculators in the financial markets, the behavior of monopolists, and the trade union movement. This last, he believes, is more than a mere matter of collective bargaining; it is a manifestation of emotional states, of basic human motives. The historical and institutional schools do not offer a satisfactory substitute for the classical system. Although they have accumulated a great deal of useful factual information, they have failed to develop any significant theoretical generalizations. "We are left, then, with an impasse—on the one hand, a theory without facts, and on the other, facts without a theory! No wonder economic science is in so primitive a state that a troubled world can find little help in it!"

Although much of his discussion of economics is penetrating and judicious, Soule's criticisms do not do justice to neoclassical theory. He does not distinguish this from the classical system out of which it developed, and so he is able to attribute to it all the shortcomings of its predecessor. He errs in holding that the traditional theory value is derived from hedonistic premises. The laws of supply and demand are rooted in what any competent observer can see going on in the world of business, and are not dependent for their validity on any particular system of psychology. The classical writers merely grafted the psychology of hedonism onto their observations of market phenomena because that was the prevailing philosophy of their day. Neither is it true that classical or neoclassical economics is necessarily an apology for the existing order. The fact that many economists have been misled into confusing *explanation* with *justification* does not prove that the two are identical. Marx found in Ricardian doctrine (much of which he accepted) ample basis for a devastating attack on the system of individualism; and there are contemporary economists (including this reviewer) who do not find neoclassical economics at all inconsistent with a belief in the desirability of socialism. Moreover, to demonstrate the shortcomings of classical theory, Soule chooses for illustration such problems as those of irrational speculation and labor agitation, for the interpretation of which it is least suited, slighting those problems of money and price where its technique is most helpful. And he

cites as evidence of its failure the very phenomena of monopolistic competition which have lately been so fruitfully illuminated by deductive analysis of the neoclassical type!

This is not to say that the neoclassical teachings constitute an all-sufficient body of social theory. They do not pretend to go beyond the range of market phenomena. But it is no valid criticism of contemporary economics to point out that it is not coextensive with sociology. Soule apparently wants the line between the various branches of social science obliterated, but it is difficult to see why this is necessary. We do need a synthetic science of society, and it is entirely appropriate that it should take note of economic phenomena; but this does not require that what has already been learned in this field shall be abandoned, nor does it preclude the pursuit of further knowledge in different phases of social behavior by division of labor among the scientists.

It is evident that Soule is dominated by the Freudian conception of human nature. In a work that purports to build its social theory on the broad basis of all the sciences, inorganic and organic, this dominance of a particular school of psychology seems inconsistent. It is doubtful whether the technique of psychoanalysis will serve to comprehend the wide variety of social problems which are crying for solution. For instance, it could illuminate only a small phase of the problem of business depressions and unemployment. But Soule uses it most effectively in the interpretation of certain contemporary developments, notably the rise of totalitarianism.

In a fascinating chapter devoted to the latter topic, he convincingly pictures this movement as a manifestation of neurotic behavior on the part of whole populations, growing out of frustrations in the environment following the First World War, and dominated by a father-image fixation which leads the people to follow blindly such leaders as Hitler and Stalin. In these terms he shows the essential similarity of nazism and communism, and represents them both as totalitarian in that they constitute religious fanatacism that supersedes all other values and tolerates no competition. He believes that the communist movement took this turn because of the faulty psychological principles on which Marxian propaganda was carried forward—its appeal to the emotional superego, instead of the rational ego, of the people. It is a significant interpretation—one which will repay careful reading.

Some critics will scoff at the suggestion that the first and second laws of thermodynamics are applicable to social phenomena. At first thought, the idea seems fantastic; yet the concept that our civilization creates a surplus of energy for which wholesome outlets must be provided is at least a useful analogy, and it may have some basis in physical reality.

Controversial, too, is the view that social science must concern itself with ends or purposes. Clearly, scientists can go too far in maintaining an attitude of detachment; programs of social policy must not be left to amateurs and pressure groups. But can science, as such, say what are the correct goals for society to pursue? Soule believes that it can, by setting forth the criteria of physical and mental health in human beings. The argument is persuasive; but even if it be not accepted, this much, at least, should be possible: If we can find a few broad objectives that by general assent would be regarded

as desirable, science should be able to point the way to their attainment. There is thus an applied science which is as reliable and certain, given the objectives, as pure science; and it is the duty of social scientists, above all, to develop the former as well as the latter.

In an imaginative work like the one before us, that pictures in bold strokes a vista not yet fully matured in the mind of the artist, there is bound to be much that is not clear, much that is questionable. But for all that, the book is a suggestive and stimulating one that represents a decidedly worth while addition to our literature.

RAYMOND T. BYE

University of Pennsylvania

A History of Economic Thought. By ERIC ROLL. Rev. and enl. (New York: Prentice-Hall, Inc. 1942 Pp. xii, 585. $4.00.)

Since good textbooks on the history of economic thought are permanently in demand, Professor Roll's revised and enlarged edition is sure of a hearty welcome. It is a comprehensive and erudite study. It is a readable text, although not comparable in brilliance to the thirty-year-old history by Gide and Rist. Roll's book, however, is also of considerable interest to the specialist in the field, since the author does not feel satisfied with offering a careful summary of the traditional kind. He suggests many new interpretations and takes a decided position in regard to old and current controversies. Because of this ambitious character, his work deserves careful examination.

Roll describes his book as an "introduction to modern theory." Although some will be skeptical of the value of the history of economic thought as a shortcut to the understanding of modern theory, this course is still a prerequisite to almost all graduate curricula. It may, however, be questioned whether a book designed for academic purposes should cover as vast a field as the evolution of economic ideas from the Old Testament prophets to John Maynard Keynes. The economic conceptions of Biblical writers, Greek philosophers and Roman jurists are more adequately appraised by incorporating them in a history of social philosophy. The student of modern economics would doubtless not be disappointed by the omission of some further sections dealing with the Christian fathers, the Schoolmen, and canon law, in order to concentrate on the economic theories developed during the last few centuries.

If we turn from the preliminaries to the core of the study, another more fundamental objection may be raised. In the Introduction, the author pledges himself to a wise principle of selection: apart from the most outstanding economists of the past, only those personalities will be analyzed whose opinions either exemplify different trends of economic thought or have significance in relation to present-day theory and controversy (p. 7). Although the verification of these criteria is a matter of personal value judgment, it may be questioned whether Roll has succeeded in living up to his program.

Take his treatment of mercantilism. Notwithstanding various divergencies of opinion, modern economists generally agree on the proposition that this

broad school of thought was not confined to the British Isles. This, however, is just the impression which the unsophisticated reader will gather from Roll's analysis. He fails adequately to stress the fact that mercantilism, as usually interpreted, was a type of economic reasoning more or less current in all European countries from the 16th to the 18th century. Yet, except for the Italian Antonio Serra, the author refers only to English writers. He is, therefore, barred from grappling with the deeper problem of how British, Dutch and Italian mercantilism differed from contemporary conceptions in Spain, France, Germany and Austria. Roll's preoccupation with English literature goes so far that the leading exponent of interventionist policies in the 17th century, the French minister Colbert, finds no place in his picture. The only reference to the great statesman to be found in the entire book—"the mercantilist measures of Colbert, designed to foster industry, were useless" (p. 140)—is too sweeping a statement to be a scientific appraisal. Also the influential and characteristic school of the German Cameralists, so admirably represented in this country by Albion W. Small, are left out of the picture. Only incidentally, in his analysis of William Petty, does Roll mention this group, labeling them as "the pseudo-economist advisers of absolute monarchs" (p. 102)—a characterization which may well be deserved but, during an age of state interventionism and well-established absolute monarchies, is not particularly significant.

In the opinion of some critical readers, Roll lays himself open to the further charge of relying too exclusively on the materialistic conception of history. Needless to say, this conception is an efficient tool for interpreting the essence and the sequence of many economic ideas. Roll, however, tries to open all doors with the same key. Unaware of the limitations of the superstructure approach, he disregards the more modern notion of the opposite relationship between institutions and theories, considering ideology as the active factor, determining both the modes of production and the social-economic structure. By relying exclusively on the materialistic interpretation, we are likely to overlook the fact that some economic doctrines have been developed and passed on to the younger generations without having any direct relation to practical policies. Some scholarly opinions seem to succeed in living their own lives. For instance, the predilection of one generation for an objective or subjective approach to value theory cannot be fully explained in terms of economic needs and social tensions. The shortcomings of the materialistic conception of history become particularly evident when an author employs the same economic and social background as a justification for two opposite and contemporary lines of thought, as, for instance, when the transition from commercial to industrial capitalism is described as the determinant of both the mercantilist and the anti-mercantilist theories.

Roll shows a certain taste for extravagant statements. We are told, for instance, that Petty is the founder of political economy (p. 100); that Malthus was "a reactionary" and "fought a rearguard action" (pp. 225-226); that James Mill's *Elements of Political Economy* (published in 1821) was "the last expression of unquestioning faith in the Ricardian School" (p. 146); and that "Keynes's approach represents a return to classical political economy" (p. 527). We also meet with some striking contradictions: in one chapter,

J. B. Say is belittled as "a Continental popularizer of Smith" (p. 215)—incidentally, the usual label in antiquated textbooks—while, in another chapter, he is highly praised as "one of the chief founders of the formalist equilibrium analysis which is the essence of present-day economic theory" (p. 354). In the final balance, however, these and other deficiencies do not seriously impair the positive contributions of Roll's work.

His masterpiece is the long chapter on Marx. Nowhere does the author proceed with greater care and show deeper insight. Yet it must be said that this chapter is narrower in scope than most other parts of the study. To the author Marx is apparently too high an authority to be exposed to even the most timid objection; Marx is *hors concours*—in contrast to all other famous economists who, as is appropriate in a scientific analysis, are studied in a critical mood and often chided for errors and inconsistencies. Roll does not even shrink from asserting that the well-known break between the first and the third volumes of *Das Kapital*—the reversal of the labor value theory by the theory of the "prices of production"—is only an apparent one or merely one in the eyes of prejudiced critics: it "rests on a misunderstanding of Marx's approach and of the function of his labour theory of value" (p. 307). Second best is the discussion of the classical system, particularly the theories expounded by the members of the inner circle of the school. The originality and the confusion of Malthus—especially, in his controversy with Ricardo on the accumulation of capital—his anticipation of the modern conception of oversaving and of the spending philosophy are better interpreted than in most recent works.

In the new edition, two former gaps of the study have been closed. One chapter surveys the American contribution, using J. B. Clark and Veblen as typical representatives of two schools of thought. A last chapter introduces the reader in a general but critical way to modern equilibrium discussion and Keynesian philosophy.

Fritz Karl Mann

American University

Basic Principles of Economics and Their Significance for Public Policy. By Harry Gunnison Brown. (Columbia, Mo.: Lucas Brothers. 1942. Pp. xvii, 542. $3.00.)

Recent books dealing with principles of economics in systematic fashion have tended to polarize about two general types. One, exemplified by such books as those of Meyers and McIsaac and Smith, conveys the impression that economic "science" is a neat, orderly, and systematic discipline. The other, to which Professor Brown's book belongs, attempts to provide a basis for understanding and (with regard to this book especially), for reforming a disorderly economic world plagued by deviltry. The former approach has many merits, but it leaves the student with the impression that however chaotic the world may be, economics is all right. The latter approach is less concerned with neat analysis than with using time-tested economic ideas as a basis for finding economic devils and casting them out.

This dichotomy is undoubtedly overemphasized, but it will perhaps convey a general impression of the present work, which is something of a *magnum opus* drawing liberally from many of the author's previous works and written down to the undergraduate level.

The book is true to the statement in the Preface that it places "chief and large emphasis on the things that have seemed . . . most fundamental theoretically and most significant for the determination of policy" (p. vi). This emphasis, followed throughout the book, includes "a sort of philosophy or defense of the price system (capitalism)—*not a defense of it as it is but an explanation and defense of it as it might be*" (p. vii; italics in the original).

The book is written in lucid style and employs provocative illustrations. It is divided into two parts: "Prices, Price Levels and Trade" and "How the Product Is Shared." It is somewhat disconcerting to find an excellent chapter on "The Determination of Value" in the second part and two pedagogically rather inadequate chapters on prices in the first. How students can understand a discussion of business cycles before they have studied distribution is something of a problem, but this book, like several others, presents business cycles before distribution. In general, however, the book covers the subjects usually found in a text on principles.

As to the value theory, instructors now inured to the elaborate apparatus of modern limited competition theory will find a conspicuous absence of diagrams as well as the absence of anything but a bare mention of monopolistic competition analysis itself even in literary form. Likewise the distribution theory presented is strictly of the pre-Cambridge variety, and so far as the treatment of interest is concerned, the efforts of Mr. Keynes and his disciples receive no recognition.

The author's views on the single tax are too well known to require comment. It is to be doubted, however, that their importance warrants devoting 17 per cent of the space to arguments for, and refutation of arguments against, this program, however admirable the exposition may be.

The chapter on business cycles will be found confusing to many students, and it is perhaps the least satisfying in the book—a statement true of most books on principles. The savings-investment problem is "solved" in typically classical manner; "persons who save nevertheless spend as effectively as those who are extravagant" (p. 91). Business depression can be reversed apparently by a general fall in the price level, or, following the same analysis, by a sufficient increase in the "volume of circulating medium." Rejection of underconsumption theories is, for the author, a most satisfactory test of whether one understands economic principles (p. 130).

In general, the treatment of most problems is strongly neoclassical. The book is shot through with implicit assumptions of long-run and full employment, and with the practice of proceeding directly from analysis based on such assumptions to real world problems. It is questionable pedagogy also to employ to any extent the old gold analyses in discussions of monetary problems. In too many instances (to this reviewer's taste) the author misses the chance to generalize the theory.

What is the significance for public policy of the principles expounded?

The possibility of a planned economy on a democratic basis is early rejected as being "extremely doubtful." Nowhere does the author demonstrate that theoretically, at least, such an economy is quite possible—perhaps as much so as "capitalism as it might be." He does not, as did Taylor and later Lange, use the planned economy device as a method of demonstrating that the formal solution of value and distribution problems is essentially the same in planned and ideally competitive societies. The author is concerned mostly with criticizing "planning" in the interventionist sense and his arguments along these lines are usually convincing.

The major applications of principles in this book are therefore directed toward removing evils of our capitalist society. To accomplish this purpose it is first necessary to educate the public in order to destroy the harmful influence of some politicians and many charlatans. This is, of course, the major purpose of the book. So educated, the public should eliminate industrial and trade union monopolies and restraints, establish free or less restricted international trade, combat business depression by Federal Reserve policy, and raise a major part of our government revenues from a tax on land rent. As for easing the transitional effects of a policy aimed at restoring competition while at the same time satisfying the desire for security without impeding the transition, no program is offered. Preoccupation with policies which will produce the desired results only in the long run gives the book a Spartan character which will chill the interest and enthusiasm with which many reform-bent students take up the study of economics. It is far to be preferred that we channel this attitude and build upon it instead of rejecting it almost at the outset. There is a real question whether unwise policies in public affairs have not resulted at least in part from the failure of "sound" economists to indicate more palatable solutions to some of our problems. The rigors of the desired competitive adjustment can be avoided, for instance, by a program of subsidies which fosters rather than retards the desired outcome. We are employing such devices in war; why not in peace? With such possibilities this book is not concerned.

The book on economic principles appropriate to the post-war world is yet to be written. Those who attempt it must start with a discussion of economic relationships which follow necessarily from the problem of scarcity and which are not explicitly or implicitly postulated on a capitalist economy. Basic general relationships must then be adapted to particular institutional patterns, of which a centrally directed economy must be one. There are elements of this approach in Professor Brown's book, as indeed there are in classical economics.

Those who write books on principles should read Professor Brown's. His chapter on "Prejudice *versus* Science," together with remarks in a similar vein scattered through the book, constitute a wholly desirable preface to any principles course. His concern with applying economic analysis to current problems must be shared; to present the tools of analysis without instruction and example as to how they are to be used is a teaching job only half done. His method of exposition is clear and thorough, and his elimination of geometric apparatus is to be preferred to the unskilled use to which

it is often put. Instruction in economic principles has become, and must become to a greater extent, a project in mass education. Textbooks now more than ever must reflect the purpose for which they are to be used. May we have more books which, like Professor Brown's, courageously accept the challenge to write along these lines.

ALFRED C. NEAL

Brown University

Engineering Economic Analysis. By CLARENCE E. BULLINGER. (New York: McGraw-Hill. 1942. Pp. xi, 359. $3.50.)

This is a textbook covering a wide field. In developing engineering cost analysis, the author found it necessary to discuss to some extent such underlying subjects as accounting, financial mathematics, and the technique of valuation and appraisals, these being necessary tools in the work of cost analysis. Two sentences from the announcement on the jacket accurately characterize the book: "The chief aim of this text on cost analysis, as applied to engineering projects, is to give students an understanding of the economic factors which are present in the engineering process. . . . The book shows that the whole economic picture of an engineering project is not complete unless viewed from three angles: the economic or dollars and cents angle, the intangible or judgment factors angle, and the financial or 'can it be financed angle.' "

The book is intended for use in undergraduate courses in engineering. It is organized with the aim of developing in the engineering student ability to make proper analyses of engineering projects when the question to be answered is: "Will it pay?"

An introductory chapter discusses the general problem of cost analysis of an engineering project. The remainder of the book is in four parts. Part I deals with what the author calls "The Economy Analysis." It discusses development and promotion costs, construction cost and development, depreciation and depletion costs, valuations and appraisals, cost patterns, estimating first and operating costs, economic return and yield on investment, and criteria for making decisions.

Part II, "The Intangible Analysis," attempts to discuss rather briefly the factors which, the author says, it is found impossible to express in concrete mathematical figures or money values. The subjects dealt with under this heading range from consumer preference to business ethics.

Part III deals with the financial analysis of a project—what funds are needed, what sources and methods of obtaining funds are available, and what financial structure should be designed.

Part IV, "Special Methods and Applications," discusses the use of the break-even chart, standard costs (very briefly), some economic characteristics of power equipment, increment costs (the out-of-pocket costs involved in extending a project), and a variety of problems involving directly and indirectly, the use of compound interest formulas.

Appendices contain interest formulas and their derivation, compound interest tables, and a bibliography.

The book should be found generally well adapted for its purpose. Obviously when such a broad field must be covered in what will usually be a one-semester course, none of the topics can be treated exhaustively and some must be sketched very, very lightly. There is, however, a good assortment of illustrative numerical examples as well as a wide variety of problems to be solved by the student.

The reviewer has some doubt as to the wisdom of the sharp separation which the author has attempted between the "economic" factors and the "intangible" or judgment factors. After all, nearly every numerical value entering into the estimated cost of a *project* contains a large element of guesswork, while many of the so-called intangibles are susceptible of expression in numerical terms, even if not with a close approach to precision.

A more emphatic and continual emphasis on the non-precise character of nearly all the data employed in estimates concerning projects not yet in actual operation would add to the value of the book. As an example of what is meant, the author defines first cost of a project or enterprise as the sum of development, promotion, and construction costs. He defines investment in a project as the sum-total of first cost plus circulating capital. This takes no account of the sometimes very large accumulation of deficits over a considerable period which may occur by reason either of necessary changes in equipment and organization or slowness in development of an adequate market. Admittedly, any *a priori* estimate of such deficits involves a wide margin of possible error, but to answer the question, "Will it pay?" one must recognize that such deficits may occur and that if they do so they become a part of the real investment of funds in the enterprise. In estimating such deficits, the opportunity cost, the loss of income which could have been obtained from the best available alternative investment, must be added to the out-of-pocket costs. This involves a wide uncertainty concerning the proper rate of return to be assumed.

Opportunity cost is nowhere mentioned in the book. The nearest approach to recognition of opportunity cost is the addition to costs of an "expected" yield on investment in problems having to do with replacement of equipment which is obsolescent but not yet physically worn out. "Expected" return is defined as that which the management regards as a "proper" return for its type of business. As to the size of these "expected" yields, the late C. E. Knoepel, management engineer, is quoted as considering 9 per cent a minimum requirement and 15 per cent the desirable requirement. In illustrative problems, the author usually assumes 8 per cent. Obviously all these rates are considerably higher than the usual opportunity cost of capital investment.

Throughout the book, emphasis is placed on "expected return from investment" or "fair rate of return," or "return to which the investor is entitled." This indicates an attitude of mind which has received much support from the decisions of the courts in rate cases. Yet in a book entitled *Economic Analysis*, it seems somewhat unfortunate that there should be failure to point out and to emphasize that, under the theory of free enterprise, no investor is

"entitled" to any return whatever by mere reason of having invested. It should be made clear to the student how it is of the very essence of the system that return should depend on accuracy of forecasting consumers' demands and on the efficiency with which operations looking to the supply of those demands are carried on; that enterprises which fall too far short of meeting these requirements not only do, but in theory should, lose instead of make gains; and that a high rate of return should come only as the automatic reward for better than average performance. The author would perhaps reply to these objections that the book is intended as an aid to young engineers who will not be asked to deal with the types of uncertainty mentioned but will be told by their superiors what rates of return, length of life of equipment, etc., they are to assume. This may be true and yet the reviewer feels that more attention to basic economics would have been an improvement.

In general, the methods of cost analysis employed in this book are those which have become standard, or at least not unusual, practice. There is, however, one striking exception. In estimating the relative advantage of replacing used or obsolescent equipment or of retaining it in use to the end of its physical life, it is recommended that the present value of the used equipment be treated as the sum of its salvage value and the cost which would be incurred, by anyone purchasing such equipment, to transport and install it in his own plant. This is surely erroneous reasoning. What one hypothetical competitor might pay for such second-hand equipment installed would rarely if ever in practice affect significantly the seller's competitive situation and then never in the simple way here assumed. The proper value to be assigned to equipment whose replacement is contemplated can be only the net amount which could be obtained from its sale, this net amount being the sale price decreased by any costs incurred by the seller in making the sale and delivering the equipment to the buyer.

In spite of the questions raised above, the book, on the whole, covers very well a part of the field of engineering education which has, until recently, been quite inadequately represented in the standard curriculum of engineering schools.

S. S. GARRETT

Cornell University

Dimensions of Society. By STUART CARTER DODD. (New York: Macmillan. 1942. Pp. ix, 944. $12.00.)

To use *laissez-faire* theory as a focus about which to build economic analysis; to use variation and selection as a pattern about which to construct sociology, biology, and other studies of living organisms; to find some dominant scheme in the array of data examined have been familiar devices used by scholars to enhance their own understanding as well as to simplify knowledge for teaching purposes. Like discovery of the universal law of gravitation, these devices constitute sea anchors that check our drift in the stormy sea of chaotic events and they serve also as guides for further discovery. In

Dimensions of Society, Stuart Carter Dodd brings a keen and imaginative mind to bear upon a somewhat different type of generalization. Rather than seeking to generalize knowledge obtained from the data examined, he turns to the problem of generalizing into a pattern the method of study. He seeks a universal device of methodology for the study of societal data. With interesting results he applies this pattern to several special fields with which he is familiar and in some of which he has previously published original research studies.

Under title of the "S-Theory," he has contrived a system of symbolism based upon the pattern of methodology above indicated. For its detail, the pattern of methodology leans heavily upon familiar statistical methods of analyzing central tendencies, variability, and correlation. His system of symbolism goes further, attempting to classify all societal data into several categories, in order to describe in a very brief space a large set of societal phenomena. Like any system of shorthand it presents a powerful instrument of analysis, but also blocks the way for many who will not have the patience to learn the new language of symbols ingeniously prepared by the author.

The system of symbols is summarized in a geometrical figure called the "Quantic Solid" of S-Theory, which shows how n dimensions may conceivably be used. The figure shows Space, Population, Time, Characteristics, which are the four basic categories. In the Time category, for example, there is T° = static situations; $T^{\pm 1}$ = change, velocities, processes, and T^{-2} = forces, accelerations. Along the characteristic scale, I° = quantitative characteristics, attributes; $I^{\pm 1}$ = quantitative characteristics, indicants; and I^{+2} = correlated characteristics. P° = population situations; $P^{\pm 1}$ = persons and plurals; and P^{+2} = groups, interrelated persons. The three dimensional coincidence in space of P^{+2}, T^{-2}, and I^{+2} gives the point marking the most developed data; that is to say, data that is about forces and accelerations among groups of interrelated persons.

In addition to the development of the S-Theory, the author makes use, in very interesting ways, of vector analysis, path coefficient analysis in correlation, and other geometrical devices. The numerous illustrations of these uses, with excellent diagrams throughout his discussion, constitute a by-product of major interest in an exceptionally good book.

James G. Smith

Princeton University

Economic History

Economic Development in Europe. By Clive Day. (New York: Macmillan. 1942. Pp. xxii, 746. $4.00.)

Economic History of Europe, 1760-1939. By Ernest L. Bogart. (New York: Longmans Green. 1942. Pp. xiii, 734. $4.50.)

These two works by distinguished authors belong in the growing list of recent textbooks on European economic history. Since they show marked dif-

ferences in the method of treatment, it may be worth while to give some detail as to the ground covered and the way in which each writer handles the problems presented.

Professor Day undertakes the large task of describing in a book of less than 750 pages the economic development of Europe since the end of the eleventh century. He considers Europe as a whole in the first 87 pages, in which he brings the story down to 1500. Then he takes up the leading countries separately, allotting almost the same space to England, France, Germany, and Russia. The three closing chapters give about 100 pages to Italy, Spain, and Ireland. The selection of Spain and Ireland is explained in the Preface as coming from the belief that a good way to understand why countries become rich is to study why other countries have become poor.

To assign almost as many pages to Russia as to England will seem strange to some, but it is clear that the vast resources and great population of Russia will give to that country an important rôle in the economic life of the world, no matter what its future organization may be. At the present time students will welcome this convenient summary of Russian economic development as an aid to a better understanding of the communist regime. In its earlier form the book was criticized in the December, 1933, number of this *Review* on the ground that too little attention was given to the period since 1914. Almost 200 pages are now allotted to these recent years. In a work of this kind it is necessary to omit many topics and to treat others more briefly than one would like to do. Each writer has to use his own judgment in making selections from the many possibilities, but one may suggest that it might have been advantageous to use more material from the fields of commerce, money and banking, and public finance, even if this had made it necessary to increase the size of the volume. In regard to commerce, it may well be that the author did not wish to go over again ground which he had already cultivated in his *History of Commerce*.

Professor Day is "more concerned to illustrate the vital processes than to provide the student with a furniture of facts." In reading the book the reviewer gained the impression that more facts are given than might be expected from this statement, and they are well chosen to lend concreteness to th narrative. The author has as another part of his plan "a discussion of the interrelation of economics and politics in history," and this adds to the merit of the volume.

Professor Day is in general careful in the use of data and in his discussion, but since so many topics are treated, it is to be expected that readers will find something with which to disagree. As an illustration, some may object to the way in which the phrase "property rights" is used in a number of places. On page 158 a section is headed, "Property *versus* Persons." That property has any rights or that there is any conflict between property and persons is impossible. What we have always had are the rights of the owners of property and the conflicts between two sets of persons, those who have property and those who have not. This criticism might be considered trivial, and loose usage of this sort might be allowed as a figure of speech, if it did not tend to cause prejudice and confuse issues by creating the impression that one party

in a controversy is not human. Property owners may be very wicked, but they are still men and women. Some few may be very good people. There are also some propertyless persons who are not good. The points which the author is making are no doubt well taken, and would meet with no objection if stated differently. No one will deny that the owners of property have often had too many privileges and those without property too few for the general welfare. The contention here is simply that we deal with the rights of persons, not of things.

Professor Bogart's undertaking differs in important respects from that of Professor Day. The Industrial Revolution is taken as the starting point. The book is divided chronologically into three parts, and each part is given a title to indicate the outstanding characteristic of the period: Part I—1760-1870, The Rise of the Machine; Part II—1870-1914, Economic Rivalries; Part III —1914-1939, Economic and Political Revolution. The chapters in each part deal with agriculture, industry, commerce and commercial policy, transportation, money and banking, labor and the labor movement, population and welfare. In each chapter the author treats in separate sections the course of development in Britain, France, and Germany. There is a final chapter of 35 pages dealing with new forms of economic organization in Russia, Italy, and Germany.

Such an arrangement presents difficulties in treatment. The first is to carry out the plan in such a way that the reader will obtain clear ideas of the general course of economic development, and it is doubtful whether the author has been successful in this respect. Some comparisons are made, but they are likely to be overlooked in studying the details given for the separate countries. The somewhat elaborate classification shown in the chapters supplies a constant temptation to repetition. This is perhaps most striking in dealing with labor. Much of the same material comes up in treating of industry, labor and the labor movement, and population and welfare. The reader may feel that he has before him a series of essays and not a single treatise.

Repetitions are more numerous than would be necessary even in carrying out the plan adopted. As an example, the same quotation from Caprivi occurs on page 288 and page 366. The book is also marred by inaccuracies, many of which are unimportant, but some of which make passages obscure or even misleading. In discussing the improvement in the speed of trains in England in the latter part of the nineteenth century, the whole effect is spoiled by a mistake in the distances from London to Edinburgh over the different railways (p. 395). On page 349 we find that Britain imported nearly half of its wheat in 1870 and only a third in 1912. On page 313 it is stated that a steel-making process other than the Bessemer was needed in England because most of the ores contained phosphorus, but on page 330 we find, "Henry Bessemer had solved this problem for Great Britain, but his process was not suitable for the phosphoric ores of Lorraine or even those of Silesia." On page 172 it is said that when the mint ratio of gold and silver is 15 to 1 and the market ratio is 15.21 to 1, the mint is discriminating against silver and it will not be presented for coinage. The statement is made that if the birth rate does not

fall as rapidly as the death rate, net additions to the population will show a decline (p. 463). From the discussion of England's monetary difficulties in 1931, one might gain the impression that the rate of exchange had fallen to \$3.40 before the gold standard was abandoned (p. 645).

There are also discrepancies in the statistical material; for example, the number of steam engines in France in 1860 is given on page 82 as 14,936 and on page 210 as nearly 19,000. On page 308 the tonnage of the British merchant marine in 1914 is given as 12,415,000, but it must have been about 19,000,000. The text on page 673 states that the people in Britain were eating less bread and potatoes in 1936 than in 1909-1913, but the accompanying table shows the opposite to be true. A somewhat amusing mistake is that Bismarck's name is consistently misspelled, seven times in the text and in the Index.

It is unfortunate that Professor Bogart does not discuss more fully his position when he states that in the period 1870-1914 the rise in wages in England was due primarily to the strength of the trade unions, and in Germany to state socialism (p. 480). This proposition is put forward incidentally in his explanation of the rise of wages in France, which seems to be based on the marginal productivity theory. It is unlikely that many students of the history of wages, even those who are inclined to attribute great importance to the organization of labor or to governmental action, would be willing to make as strong a statement as that given above. The great increase in productivity must have been the first factor in the increase in wages in both England and Germany.

The reviewer takes issue with Professor Bogart in his view that industrialization in France was hampered by the slight growth in population (p. 334). He seems to be falling in with a trend of thought which has become popular in recent years and is a part of the general pessimism that has prevailed since 1929. We hear a great deal about a "mature economy" and about the slackening of industrial expansion that will come with a stationary population. There is good reason to doubt the validity of this thesis. Common observation upholds the old doctrine that "the consuming power of a community is indefinitely great." It is granted that in a very small population the market for any one commodity may not be large enough to allow the advantages of large-scale production, but that limitation could hardly have been present in France in the latter part of the nineteenth century. A different commercial policy might also have made foreign markets more accessible. It is true that the consumption of staple foods may not show a great increase in a stationary population, and the demand for different manufactures will not expand at the same rate, but taking manufactures and the service industries as a whole, consumption depends more on incomes than on the number of the people. Very few families in the United States would have any trouble in consuming the goods and services that could be bought with \$10,000 a year. On the production side it may be argued that expansion cannot take place so rapidly without an increasing labor supply, but we are making great progress in using capital to increase the output of each worker. A comparison of the population of the European countries at different periods with reference to their indus-

trial progress would raise doubts of any causal connection. In 1801 England and Wales had 8,892,536 and France 27,500,000. One might well contend that the most rapid industrial development of France came after the population became almost stationary. Clearly other factors must have made progress slower in that country than in Germany.

The criticisms which have been made should not be taken to mean that the reviewer does not consider Professor Bogart's book valuable. A tremendous amount of material is made available in convenient form. Many interpretations are clear and enlightening. There comes to mind the statement on page 50 of the relation of the labor supply to the development of machine production. One of the most interesting suggestions is brought out in the comparison of the accumulation of capital in England in the period of the Industrial Revolution and in Russia under the Five-Year Plans (p. 697). The simplified situation under an economic dictatorship brings out clearly the essentials of the process, which are not so easy to find in the system of private enterprise. Much help may be obtained from the Russian experience in understanding the nature of spending, saving, and the production of capital. Professor Bogart correctly points to the use of vast numbers of men in the creation of capital instead of finishing goods for consumption as an important cause of the low level of living in both countries in the periods mentioned. The Russians have supplied us with excellent material to illustrate Taussig's theoretical analysis in *Wages and Capital.*

As a general criticism of both the authors under review it is submitted that their treatment of economic development would have been improved if they had given more consideration to the location of industry. Studies of the physiographic and human factors in the establishment and maintenance of industries supply very useful aid in understanding regional history.

Both authors provide bibliographies. Professor Day has suggestions for reading following each chapter, and at the end of the volume authorities are listed for the chapters. Professor Bogart has a general bibliography at the beginning of the book and special bibliographical notes for each chapter.

Clement Akerman

Reed College

Economic Systems; National Economies

The New Belief in the Common Man. By Carl Joachim Friedrich. (Boston: Little Brown. 1942. Pp. xiii, 345. $3.00.)

Amid current disillusionments, the announcement of a *New Belief in the Common Man* is designed to strike with revolutionary force. To his fresh discussion of this old subject Professor Friedrich brings his German university training, his keen interest in public administration and his acquaintance with political theory. He defends "democracy," or what is equivalent in his scheme "constitutional government," as the most satisfying creed for free men. But the distinctive feature of his treatment is the contention that democracy can

henceforth safely rest only on "a new belief in the common man" which he has discovered. The tradition of the common man as represented by Jefferson and Jackson is praised but repudiated as too rational a conception. "The new belief" recognizes that the "common man" is moved more by feeling and sentiment than by reason or theory. The "common man" of Professor Friedrich is not a collective term for the mass of mankind but a label for that "common sense" or the "sense for the traditional standards, values and beliefs that gives the common man's judgments stability and consistency" (p. 189). Other theorists of democracy, according to the author, have been elite wolves in sheep's clothing; in fact the intellectuals as a class, whether they have been grouped conventionally as aristocrats or democrats, have all believed in rule and mastery by an elite class. "I know whereof I speak," the author insists, "for I myself have been converted in these past twenty years to a belief in the common man, after being surrounded by the belief in the elite" (p. 270).

What he presents is not so much a "new belief" as a new "common man." He is not the man in the street but rather an abstract phenomenon compounded of several elements: the need of society to establish hierarchies of skills and talent; the ability of the ordinary man through "the instinct of workmanship" to recognize efficiency in any field; his willingness to remain in his humble place in the scheme and to choose between good and bad experts and good and bad policies. In short, Professor Friedrich's democracy is much more or much less than political democracy. No wonder he insists that traditional democracy embodied in the older conception of popular sovereignty and majority rule and frequent elections does not square with "the new belief in the common man." For it may easily happen that the common people, not as they are defined by the author, but as we actually know them, would not evince that sense for the "traditional" standard, and accept that leadership of technologues and civil servants, which assure his so-called stability and consistency in the movement of society.

The author's position recalls one of Burke's eloquent passages: "To be attached to the subdivision, to love the little platoon we belong to in society, is the first principle (the germ as it were) of public affections."

With this premise and through the dexterous use of such ambiguous terms as "functional," "pragmatic," "realistic," "progressive," the author invests the American ideal of democracy, equality and freedom, with a content which reduces the rôle of the common man to his status in medieval times. But, then, to the author the great age of true democracy is the medieval era, for the "medieval constitutional systems" of king and "estates," according to his treatment of history, "provided for the expression of consent by the common men" (pp. 56, 70-71).

While accepting the principle that the ultimate source of all power is in the people, he crosses it with another familiar but more elusive principle that election is not necessarily the best method of securing the representation and smooth functioning of society. It seems we need a "qualified majority," whose purpose would be to check "traditional" Jeffersonian and Jacksonian democracy, that system which another scholar from Germany over a hundred

years ago called "democratic absolutism." Similar crossings and manipulations yield the author also a theory of civil service organization whose test of responsiveness to the needs of the common man is the absence of any revolution that cannot be suppressed.

The author's own "elite" class is to be found in an all-powerful hierarchal civil service in government and business. Its model is the potent German "ministerial bureaucracy" which students have described as "non-responsible." By describing such a civil service for the whole country as "functional," he is enabled to say that he has really no elite or ruling class, that there is no coersive state, but only "a commonwealth of mutual servants," with "a rigid system of *subordination*" (pp. 193, 278). "A man's function determines his rôle in the society" (p. 193). Those who are familiar with medieval social philosophy will here recognize the doctrine that all men should love one another but in their respective places of superiority and inferiority.

The basic outline of his theory the author had already presented in 1932 in a joint study *Responsible Bureaucracy,* especially in the concluding chapter, "A Federative Commonwealth of Mutual Servants." The addition in the present book is Veblen's instinct of workmanship. The only purpose of the instinct appears to be that of a verbal substitute for the author's original doctrine of the responsibility of the bureaucracy. This doctrine consisted essentially of the principle that what "may appear arbitrary and therefore irrational" in the bureaucracy to an outsider "may be completely rational when looked at from within" (p. 14).

The "sense of workmanship" in man, says the author, "complements the so-called common sense" that defines the common man and his rôle (p. 189). It acts to outlaw any development which runs counter to the presumed traditional standards. As such, each man in his "function" or stratified category will always be a check on the inefficiency or arbitrariness in the hierarchal scheme as a hierarchy. So there is in effect little need for much of the popular elective machinery or other familiar methods of responsibility to the public and certainly not for their extension. All this can be better performed by polls, propaganda, and other "informational" procedures which avoid the danger of what the author called elsewhere the despotism of a "popular majority"[1] but keeps the "administration" well informed as to the sentiment and feeling of the mass.

In the author's use of the instinct, careful students of Veblen's work will rather recognize what Veblen called the "perversion of the instinct of workmanship," or "the instinct of sportsmanship."

In short "the new belief in the common man" which the author here richly elaborates with a good deal of verve and miscellaneous learning boils down to a not-so-new reliance upon the well-intentioned administrative aristocrat. Is this perhaps but a deduction by a reader or a speculation based on theoretical considerations? Not so; for Professor Friedrich some years ago was just through praising such a "democracy" as he now urges when it was transformed before his eyes into a totalitarian absolutism. I refer to his writings on Germany between July, 1930, and the beginning of 1933.

[1] *Constitutional Government and Politics* (1937), p. 129.

During a good part of that period President Hindenburg ruled in defiance of the Reichstag by the use of the famous Article 48 of the Weimar Constitution. This article provided that, if the public safety be seriously threatened, the president, with the aid of the armed forces if necessary, can suspend in whole or in part the fundamental liberties of person and property, and rule by decree and ordinance. But President Hindenburg used the article even to put through financial measures. Opposition by the Reichstag, the president met by dissolving it. With Hitler's accession in January, 1933, came the more systematic use of Article 48 for all time, to end the Weimar Republic and maintain the Third Reich.

Yet throughout the entire intervening period, the author vigorously defended Hindenburg's use of Article 48, as making constitutional democracy workable. It might be called at worst, he said, "constitutional dictatorship" or a "truly benevolent despotism"; but this was not real dictatorship, for Hindenburg is "the constitutionally elected President of a democratic republic and he is exercising powers granted by the constitution."

Respectable American scholars saw in the events, especially in the use of Article 48, not democracy and democratic rule but at best an "interregnum." The author, however, charged them in the April, 1933, issue of the *American Political Science Review* with being biased by " 'liberal' prejudice," and with being infected with the unscholarly habit of giving credence to "temporary backstage gossip."

What the critics "failed" to see, he felt, was that along with a president who "has grown old in unswerving loyalty and service to his country," there was the permanent civil service "of high excellence and proven loyalty to the state." The bureaucracy "represents the most traditional aspect of German political life. . . . In difficult times the most traditional and deep rooted elements of a political structure come to the fore; it is in its best established behavior patterns that a nation seeks its salvation." Therefore "in any case Germany will remain a constitutional democratic state with strong socializing tendencies whose backbone will continue to be its professional civil service."[2]

In 1941, in the chapter "Methodology" of his *Constitutional Government and Democracy,* he admitted that the prediction appeared reckless but this was so because he had neglected to state it in the hypothetical form of "other things being equal," of the economists. Such a proviso is "the sign of a scientific sense of the limitation of predicting actual occurrences." His difficulty had been not a "question of exactitude, but of lack of information" (p. 572). Perhaps it was appropriate that the chapter on "Methodology" should contain a summary of *The New Belief in the Common Man.*

It is the fate of few theories to be tested before they are even completely stated. Professor Friedrich, however, clings to his views with emotional loyalty. He fondly refers to his own doctrine as "Christian" and castigates all opposition doctrines as "pagan," a procedure that brings to mind Alexander

[2] "Dictatorship in Germany?" *Foreign Affairs,* Oct. 1930, pp. 127, 132; "The Development of the Executive Power in Germany" in *Am. Pol. Sci. Rev.,* Apr., 1933, pp. 197, 200-201, 203.

Hamilton's proposal to organize a "Christian Constitutional Society" to fight President Jefferson.

JOSEPH DORFMAN

Columbia University

The United States and Civilization. By JOHN U. NEF. (Chicago: Univ. of Chicago Press. 1942. Pp. xvi, 410. $3.00.)

According to the Preface, "The present book is in the nature of an epilogue to . . . a study that I have been making of industrial history in relation to the history of civilization since the Renaissance," to which a number of articles in various journals and the brochure on *Industry and Government in France and England, 1540-1640* (Philadelphia, 1940) are also contributory, although "far the greater part . . . remains to be completed." This "epilogue" is published in advance of the completed work because of "the uncertainty of the times and the apparent relevancy to the issues that confront the United States today," and also because it had been prepared for delivery as a series of lectures under the Charles R. Walgreen Foundation. It is dedicated to President Hutchins, of whom the author says, "Thanks to him, it is at the University of Chicago alone that the important problems with which I have attempted to deal have been seriously and continually raised during the last decade."

Professor Nef is persuaded that the industrial world is facing catastrophe as a result of the breakdown of moral and intellectual guiding principles. In some passages he seems to attribute the prospective reduction of the rate of increase of the national dividend directly to this "moral and intellectual" collapse (*e.g.*, on p. 30), this failure "to master the machine and use it for the highest ends of human existence" (p. 5). Decline in the rate of increase of population also seems to him to sound the knell of mass porduction. "In all probability the pressure exerted by growing population to increase the volume of output in Western Europe and America will be nothing like as great during the hundred years as in the nineteenth century" (p. 47); and in this connection he cites Rostovtzeff's attribution of the collapse of the villa economy to the collapse of the market for wine and olive oil. It is true, he notes, that Professor Rostovtzeff hedged this explanation, and that population growth "has been both cause and effect" (p. 43). Nevertheless for present purposes it is considered only as cause.

This must not be taken for concern. On the contrary, it seems to Professor Nef that we are suffering from "overindustrialization." As he puts it, "Our point is that the emphasis in some countries on machine-made goods and services, on synthetic entertainments, and on the financial structure designed to sell or publicize them, has been carried so far that poor and rich alike are starved for other values which are more inspiring" (p. 53). He is inclined to be somewhat contemptuous of radiators, bathtubs, electric refrigerators, air-conditioning devices, and "the radio sets which some of our contemporaries regard as conspicuous marks of civilized existence" (p. 47).

His contempt reaches to Professor E. L. Thorndike's indices of "goodness of life for good people," especially abundance of dentists. In short, Professor Nef not only assumes and accepts but even seems to relish the prospect of industrial decline. To him, "The hope of the Western peoples would seem to lie in the recognition that their riches, their leisure, and their health have been purchased in recent years at an increasingly heavy price in intelligence, in the sense of individual responsibility, and in the general love of mankind" (p. 61).

Space will not permit a discussion of these points or of Professor Nef's "ends of civilization"—humanism, religion, moral philosophy, and art—or of his educational, economic, democratic, and international "means of approach" to these ends. A few impressions will have to suffice. A considerable part of the space allotted to these subjects, which is the latter three-quarters of the book, seems to be taken up with arguing that beauty and goodness, the sense of individual responsibility and the general love of mankind, are good things of which we do not have enough and imperatively require more. The impression is everywhere conveyed that few people are aware of this, or willing to admit it. This impression is greatly heightened by the antithesis, which is everywhere implied and often stated outright, between bathtubs and beauty, dentists and goodness, as though it were the (temporary) presence of refrigerators and radios in America which is responsible for the absence of art and virtue.

Professor Nef makes this antithesis possible by individualizing beauty, goodness, and the rest, all of which are viewed by him not so much as the cultural achievements of communities as qualities of the individual soul. Even democracy is conceived in terms of "the cultivation of righteousness, knowledge, and beauty." It is this conception of culture as a quality of individuals, apparently, which leads Professor Nef to think of France "with its balance, its finish, its reason," as the nation where, although "after a century of adaptation that began long before the French Revolution, France may be said to have ceased trying to keep up with the other great nations as an industrial power," American expatriates nevertheless "found the greatest painters and the greatest writers"; and to think of America as an artistic and intellectual desert which "is partly the result of the failure of Americans as a people to husband and encourage such artistic and intellectual strength as they possess." In the same spirit he can reject the testing of all theories by facts in favor of "intuition" (p. 117) and even declare that "without the existence of some sort of authority in moral and intellectual matters, there is no check on the authority of political rulers" (p. 98).

What is the drift of this way of thinking? Professor Nef has protested that we must not "regard as totalitarian every attempt to establish the authority of human wisdom" (p. 96). The distinction is obvious between ideas and the physical violence which Professor Nef sincerely abhors. But, if, as he believes, "the danger of a sudden collapse seems to be more on our side than on that of totalitarianism"; if it is true that "Less imbued than the peoples who have enjoyed a long experience of constitutional government

with the illusion that material progress will bring with it all the good things of life, the totalitarians have found it easier to cast out this illusion than have the more democratic countries" (p. 106); then constitutionalism and democracy, no less than material progress, must mean something very different from what most of us had supposed. To many people it seems highly significant that the material conquest of North America has in fact been followed by a very considerable degree of cultural maturity, and that constitutionalism and democracy are in a fair way to prove their superior toughness and solidity. Professor Nef abhors "pragmatism" and the test of experience, to which he opposes "faith" (pp. 183 *ff.*). This, surely, is the totalitarian state of mind. Professor Nef's faith is not that of Hitler or Stalin, but neither are those of Hitler or Stalin identical. They do have something in common, and that something—the *a priori* way of thinking—Professor Nef seems to share and advocate.

C. E. Ayres

University of Texas

An Economic Survey of the Pacific Area. Part I. *Population and Land Utilization.* By Karl J. Pelzer. Part II. *Transportation and Trade.* By Katrine R. C. Greene and Joseph D. Phillips. Part III. *Industrialization of the Western Pacific.* By Kate L. Mitchell. I.P.R. inquiry ser. (New York: Internat. Secretariat, Inst. of Pacific Relations. 1941 and 1942. Pp. xv, 215; xiv, 208; xvii, 322. $2.00; $2.00; $2.50.)

These three monographs, constituting *An Economic Survey of the Pacific Area,* were designed to supplement and bring up to date important sections of the *Economic Handbook of the Pacific Area* published by the Institute of Pacific Relations in 1934. The *Handbook* was extremely useful to scholars interested in the Far East because it made it possible for them to obtain in convenient form comparative statistical data on population, land utilization, food production and consumption, transportation, public finance, capital movements, trade and international mineral, agricultural, and textile products in the Pacific Area. It presented with more detail for the area covered the kind of information on territory, population, production, consumption, trade and public finance which is to be found in the Statistical Year-Book published annually by the League of Nations. There was somewhat more text but the statistical tables and the explanatory notes were the main contribution. The materials upon which the tables were based were often faulty and inadequate but they were the best available and were supplemented by the estimates of various "experts." For the most part these statistical tables did not go beyond the year 1932 and it was highly desirable that they be brought up to date. This new work was begun under Frederick V. Field, editor of the *Handbook,* and carried on by various members of the research staff of the Institute. All three volumes were completed before Pearl Harbor, but Volume III was not published until after the attack on the United States by Japan.

Volumes I and II carry on the tradition of the *Handbook* in that they present copious statistical information on population, land utilization, transportation, and trade with brief factual introductions and explanatory notes as to the inadequacy and noncomparability of much of the data. There are summary tables for the Pacific Area as a whole, followed by a more detailed treatment for each country or colony. The nations, colonies or territories directly treated in this survey are Japan Proper, Korea and Formosa, Manchuria, China, French Indo-China, Thailand, the colonies forming British Malaya, the Netherlands Indies, the Philippines, Australia, New Zealand, Canada, the United States of America, and the Union of Soviet Socialist Republics.

Volume III—*Industrialization of the Western Pacific*—differs from the two preceding volumes both in method and in area covered. Miss Mitchell attempts to describe and interpret the extent and nature of industrial development in Eastern Asia and the Southern Pacific. Her interpretation has been much influenced by the Marxian theory of imperialism. The factual material on industrialization is neither as complete or as well documented as that on population, transportation and trade. Miss Mitchell's study covers the Western Pacific rather than the whole Pacific area. It omits Canada and the United States but includes India and Burma, though they are not strictly Far Eastern countries, because their economic development has much in common with that of the colonial and semi-colonial areas in the Far East; the Soviet Far East is omitted because it does not fit into the economic and political pattern of the region. It is also probable that it is extremely difficult to obtain quantitative information on industrialization in the Soviet Far East.

Mr. Pelzer's monograph contains two long chapters of which the first is concerned with population and the second with land utilization and land tenure. Such familiar population problems as geographical distribution and density, growth, age and occupational distribution, urbanization and migration are outlined in comparative tables for the whole Pacific area and then in more detail for each country or colony. He does not attempt to use the more refined measures of population growth (fertility rates and net reproduction rates) because they can be derived only for countries with adequate statistics; but he points out that Kuczynski's net reproduction rates based on pre-war figures indicate a tendency toward a declining population in Austrialia, New Zealand, and the United States, toward a stationary population in Canada, and toward a continued increase of the population in Japan and the U.S.S.R. It so happens that in those four countries (Australia, Canada, New Zealand and the United States) in which population will decline unless present trends are reversed, the density of population is low, all immigration is restricted, and oriental immigration is either by law or in fact prohibited.

In his second chapter on land utilization and land tenure, Mr. Pelzer presents data on cultivated and forest areas, crop acreage, land ownership, size of land holdings, tenancy and types of farming. Of the countries in the Pacific area, Japan is the most densely settled, followed by the Philippine Islands, China, British Malaya and the Netherlands Indies. In spite of this high population density, agriculture is still the main occupation of nearly half the population

of Japan and of an even larger proportion in the other countries mentioned. It is not surprising, therefore, that throughout this area agriculture is very intensive, the average land holding very small, agricultural distress is often acute, and conditions of land tenure far from satisfactory.

In the first part of Volume II, Miss Greene considers four types of transportation—shipping, railways, highways and motor vehicles, and airways. She points out that Japan is the only country in the Far East which is a large owner and operator of shipping fleets and international air services and that the Japanese merchant fleet at the outbreak of war consisted of fast, modern vessels with a larger proportion under seven years of age than in any other maritime fleet. Japan, Formosa and the United States have both the most extended railway networks and the most extensive highway systems (in relation to area) of any Pacific countries, but the number of automotive vehicles per person is highest in the United States, New Zealand, Canada and Australia. The increase in railway mileage in Manchuria in recent years has been very rapid and by 1939 the total exceeded that for China Proper. The fact that Japan possessed extensive transportation facilities and had developed heavy industries which did not exist elsewhere in the Far East gave her a decided advantage in the first year of the war against the United Nations. Following the introductory section, there are detailed statistical tables covering the shipping, railways, highways, motor vehicles and airways of each of the Pacific countries.

The foreign trade of the Pacific Area is discussed by Mr. Phillips in the second part of Volume II. There is a brief but competent description of trade controls in each of the countries and colonial territories bordering on the Pacific, followed by statistical tables outlining the trade of each of these areas by commodities and by countries of origin and destination for the years 1909-13 (average) to 1939.

Miss Mitchell's work on the industrialization of the Western Pacific differs from the two preceding volumes in that it attempts to be interpretive as well as factual and therein, because of the author's very strong political (pro-Marxian and pro-Soviet) convictions, lies its weakness. To the layman it may seem that facts are facts, but the professional economist or historian knows that two authors confronted with the same data may arrive at diametrically opposed conclusions because they must select from the facts, they must interpret against a background, and they may base conclusions on apparently exact statistical measures when the original statistical materials are incomplete and faulty. The persistent underestimation of Japanese strength in the economic, as well as the military sphere, was the consequence of too much wishful thinking and too little sound scholarship on the part of the Far Eastern experts. In fairness to Miss Mitchell, it must be admitted that this was a very common failing, and that her work suffers from it rather less than the work of many others.

She shows clearly that there was no heavy industry and comparatively little large-scale light industry in China or in any of the colonial areas in the Western Pacific; that there was a beginning of heavy industry in Australia and India where the movement was immensely accelerated by the outbreak of the

war in Europe; and that only in Japan and in Japanese controlled territory (Korea and Manchuria) was there a heavy industry capable of producing the arms, ammunition, tanks, planes and ships required by modern warfare. The industrial backwardness of this great region which contains about one-half the world's population is attributed to its colonial or semi-colonial status and to the policies of the imperialist powers.

Miss Mitchell completely absolves Russia from any territorial or imperialist ambitions. On pages 5 and 6, she states: "The history of the Far East since the closing years of the nineteenth century has been marked by an intense rivalry among several great powers for control of the resources and markets of the less developed industrial areas. . . . There have been many phases to this struggle, ranging from the military aggression of Japan to the defensive political and economic maneuvers of the United States in her efforts to maintain the Open Door not only in China but throughout the Far East. The rôle of the Soviet Union throughout has been unique in that it has been purely strategic, since the U.S.S.R. has no capital investments and no territorial, economic, or political concessions in any of the countries under discussion." On this point, it is interesting to compare the experts. Professor Quigley, in a volume which was published at just about the same time, commented rather unfavorably on Soviet criticism of the imperialist powers:

> The Soviet Union failed to live up to the standards of international conduct which it prescribed for other states. With cynical realism it not only maintained the Russian hold upon northern Manchuria but it also established a system of control over Outer Mongolia far more complete than the Tsars had enjoyed and extended its influence in a decisive degree over Sinkiang. Together these areas comprise one and one-third million square miles, nearly a third of the Chinese Empire. In Outer Mongolia the Soviets assisted in setting up a revolutionary government of "Young Mongols" along Communist lines. With the U.S.S.R. alone has the Mongolian People's Republic had diplomatic relations and it has been called an all but avowed member of the Soviet Union. Soviet penetration of Sinkiang is essentially economic in character, but has been pursued through political arrangements with the provincial government. Chinese government and trade in Sinkiang exist only on sufferance.[1]

When the experts differ as much as this, and when such differences vitally influence the selection and interpretation of facts, it is not surprising that the public is confused and inclined to believe what it is pleasant to believe—that the enemy is weak, that Germany can be defeated by a blockade, that Japan can be brought to her knees by economic sanctions, that the United States can insure victory for the democracies by methods short of war.

The weakest part of Miss Mitchell's book is her treatment of Japan and Japanese controlled territory. This part of her work appears to be an afterthought. She relies largely on secondary sources such as the *Japan Year Book* and the *Japan-Manchoukuo Year Book* which are not official publications and which contain many errors. It is sometimes necessary to use them for recent years when official publications were either delayed or not published for strategic reasons, but most official reports were available through 1937 and many through 1938 and 1939.

The author permits her dislike of the Japanese military to blind her to the

[1] H. S. Quigley, *Far Eastern War, 1937-1941* (Boston, World Peace Found., 1942), p. 48.

fact that Japan was developing a very efficient war economy with the same social sacrifices which a war economy imposes under democratic and totalitarian regimes alike. For example, she failed to appreciate the extent to which Japanese war industry was already depending on raw materials from East Asia and the South Seas. The iron industry and the very important aluminum industry were cases in point. Japan had no aluminum industry before 1934, but built it up rapidly after the outbreak of the China Incident. One index of this activity, the export of bauxite from the Netherlands Indies to Japan, is not mentioned at all although it amounted to more than 200,000 tons a year in 1939 and 1940, whereas the very much smaller export from Malaya is commented upon (p. 181).

Similarly the problems which arise in every country engaged in total war—an insufficient supply of skilled labor, rising living costs, civilian rationing, scarcity of strategic materials—are often treated as though they were something peculiar to Japan and indicative of great weakness. On these points, the author is usually quoting the conclusions of other economists. The discussion of wartime productivity in Japan on pages 41 and 42 is based on an article by Gragdanzev[2] which has been widely quoted as part of the story of Japan's weakness. This is a case where inadequate statistics are carelessly used to paint a picture which seems exact because definite percentage figures are given. The conclusions are largely invalidated by the fact that the production index used does not include much of the output of the armament and munitions industries, whereas the employment index used does include workers in those industries. Even if this were not so, the method of base-year weighting used in the construction of the production index results in a downward bias in a period in which industrial activity shifted very rapidly from a situation where consumers' goods were predominant to one where producers' goods and the products of heavy industry were predominant. This does not prove that there was no decline in productivity in Japanese industry, but merely that Mr. Gragdanzev does not prove the reverse. Such proof, one way or another, is impossible on the basis of the data available.

This general criticism of the interpretive side of Miss Mitchell's work has been treated at some length because it applies to a great many of the economic conclusions on Japan published in the *Far Eastern Survey,* an Institute of Pacific Relations publication, and in *Amerasia,* an independent publication of which Miss Mitchell and other members of the staff of the Institute are editors. These and other similar publications have played a substantial part in misleading the American public and to some extent the Administration as to the economic strength of Japan.

Volumes I and II and those parts of Miss Mitchell's volume which deal with China and the colonial areas contain much useful factual material not available elsewhere in convenient form, as is true of several other volumes in this Inquiry Series.

ELIZABETH BOODY SCHUMPETER

Cambridge

[2] A. Gragdanzev, "Japan's Industrial Output Slackens," *Far Eastern Survey,* April 7, 1941.

Aspects of Japanese Agriculture: A Preliminary Survey. By SHIROSHI NASU. I.P.R. internat. research series. (New York: Inst. of Pacific Relations. 1941. Pp. ix, 168. $1.50.)

A scientific analysis of Japanese agriculture, prepared by an outstanding authority and issued in this country about the time Japan struck at Pearl Harbor, is of special significance during the war period. As the title indicates, the work represents an interim report on a long-term study, conducted by Professor Nasu for the International Secretariat of the Institute of Pacific Relations. An earlier report by the same author, published in 1929 under the title *Land Utilization in Japan*, has been long out of print.. Wartime censorship has prevented detailed treatment of changes in Japanese agriculture and rural life during the period since 1937. Of 171 tables illustrating the text, 6 have been omitted, while a number of those included do not cover the later years of the past decade.

Despite the gaps thus left in the more recent data, the work constitutes a solid piece of analytical presentation, summarizing the results of years of painstaking research in a specialized field not sufficiently known in this country. An introductory chapter on the social conditions of land utilization in Japan is followed by a chapter on geography, climate, geology and soils. Three chapters deal with the distribution of land resources according to use, the outstanding features and regional characteristics of Japanese agriculture, and the utilization of forest and waste land. The utilization of cultivated land is considered under the headings of changes in cultivated area and the rate of exploitation, annual frequency of utilization, and productive power of cultivated land. The last three chapters treat of profits and the price of land, the farmers' living conditions, and land utilization with respect to the agricultural population and the food supply. Although the greater part of the study is devoted to Japan Proper, there are concluding sections to a number of the chapters which give summary treatment to conditions in Korea and Formosa.

To a considerable extent, the facts adduced by Professor Nasu tend to build up the case which is normally advanced for Japanese expansion—the overcrowding of the islands and consequent pressure on scanty natural resources. Table 2 shows population per square kilometer of cultivated land in 1938 as 1,184 in Japan compared with 913 in Northern Ireland, the closest competitor. Japanese soils are poor, being especially deficient in lime. Animal husbandry is relatively undeveloped, largely because the grazing area is insufficient, and fish supplants meat in the Japanese diet. The exploitation of land "has virtually reached the limit, leaving little room for further reclamation even with highly expensive and thoughtful assistance from the government" (p. 77). The intensity of utilization of land, or its "annual frequency," is high, exceeding 100 per cent in all prefectures except two (p. 92). The value of production of the unit area of cultivated land in Japan is "rather high as compared with other countries" (p. 107). Taking choice districts in Japan, the average rice yield per unit area "will easily surpass that of Spain and Italy," countries otherwise superior to Japan, due to the extensive utilization

more recent than those here provided, production has been well maintained.

of marginal land by Japanese agriculture. Only Germany surpasses Japan in per hectare yield of barley and wheat (Table 101, p. 110). The intensity of labor utilization is high, but a further increase in the intensity of labor will not increase output (p. 116). The supply of fertilizer per unit area has "already nearly reached its saturation point" (p. 119).

This selection of some of the author's major conclusions is not brought together for purposes of argument. Only an expert, with much greater knowledge in the field than the reviewer, could go behind Professor Nasu's facts in order to test their validity and thence to question his results. The selection merely serves to show how closely the author's scientific conclusions accord with prevalent conceptions about agriculture and population in Japan. It also underscores Professor Nasu's evident approval of the current situation when he states: "Existence of up-to-date factories with high technical efficiency side by side with millions of small farms amply supplying these factories with skillful but low-waged man-power constitutes the backbone of the national economy of Japan. This relationship is made possible by the fact that the birth rate of the rural population is higher than that of the urban population" (p. 8). Not so strange, then, Professor Nasu also looks with alarm to the day when Japan will have "to deal with the possible loss of this equilibrum between the rural and urban population. . . . The question becomes more important when one views the farming population not only as the producer of agricultural commodities, but rather as the source of the nation's offspring" (pp. 8-9). The "low-waged man-power," of course, connotes an even more miserably paid agricultural population, and the consequent limited development of Japan's home market has been historically the greatest urge behind aggressive expansion. The above quotations from the early pages of the author's volume are therefore linked with the following quotation from the last page of his conclusion:

> In these circumstances, one way of solving the population problem is surely emigration. To this end there has been advocated a policy of promoting Japanese emigration to Manchoukuo, with a view to enabling the emigrants to settle there as peasant proprietors. Naturally there are various difficulties to overcome, but this seems to be an imperative policy inasmuch as the doors of other countries are closed to Japan. If and when the plan of sending one million farming families to Manchoukuo within the coming twenty years is realized, then the excessive intensity of farming in Japan proper will be somewhat relieved. Thousands of ardent village youths, after having been trained for some time under the strictest discipline in an emigrant training school, crossed the Japan Sea in 1938. With their feet now firmly set on the continent and breathing the freer air there, they are expected to become the nucleus of the planned emigration of the future. Thus Japan has ushered in one of the largest-scale migrations in modern history as a key element in her national policy. Incidentally, it may be added that the migration of Japanese farmers into Manchoukuo is looked upon as one means of feeding the newly constructed railway lines in Manchoukuo.

With the United States at war with Japan, this volume has undoubtedly already been searched for items bearing on Japanese wartime economic strength. Unfortunately, many of the more useful details, particularly for the recent years, have been omitted. Such facts as are indicated do not argue any great vulnerability on the agricultural front. If we accept official data

According to both authors, there is no question as to whether or not India

more recent than those here provided, production has been well maintained, at least in Japan Proper. The twin problems of man power and fertilizer have apparently been solved, at least up to the present. Professor Nasu rather incautiously suggests the most significant factor in the solution of the man-power problem. On page 116 he notes that "it has often been found possible to reduce the average employment of labor by means of coöperative management of agriculture without bringing about any noticeable decrease in production, especially in the cultivation of rice." Improved utilization of a smaller man-power and horse-power force, plus an increasing use of machinery, has characterized the movement in Japanese agriculture since 1937. There are limits to this development, however, even in wartime Japan. Fertilizer supply also presents difficulties, what with the pressure on the chemical industry and declining soya bean production in Manchuria.

A crisis in agriculture does not appear imminent, so far as production for war is concerned. In the future, it is the social relations of Japanese agriculture that present the gravest threat to stability. Professor Nasu's first chapter is carefully shaded on the positive side. Little is said of usury and the debt burden in the Japanese countryside; treatment of this subject is so slight throughout the book, in fact, as to constitute one of its most glaring omissions. Even this chapter, however, includes some illuminating facts. In 1938 some 43,000 persons, constituting 1.5 per cent of landowners in Japan, owned 1,589,000 cho, or 26.2 per cent of the cultivated land. At the other end of the scale, 3,783,000 persons, constituting 74.3 per cent of landowners, owned 1,527,000 cho, or 25.1 per cent of the cultivated land (Tables 13 and 14). In this year nearly half the land (46.5 per cent) was cultivated by tenants (Table 15). This situation is reflected in a later chapter on the farmers' living conditions. The rural-urban migration (consequent on the rapid growth of industry), wartime prices, and other factors have temporarily pushed Japan's basic agrarian readjustment into the background; tenant-landlord disputes, as a result, have declined in recent years. With the further progress of the war, however, the nemesis lurking in the unsound social relations of Japanese agriculture is likely to overtake the architects of Japan's wartime economy.

T. A. Bisson

Washington, D.C.

Study of Indian Economics. By Pramathanath Banerjea. 5th ed. (London: Macmillan. 1940. Pp. 395.)

Economic Reconstruction. By Kaghendra Nath Sen. (Calcutta: Univ. of Calcutta. 1939. Pp. 500.)

A straightforward approach to the problems of India is offered in the two books under review. Pramathanath Banerjea's *Study of Indian Economics*, a fifth edition, is the mellowed product of a lifetime. Kaghendra Nath Sen's *Economic Reconstruction* tells the story of Indian thought on harnessing economic development to the public interest. Both books employ the disciplined Marshallian method of presenting economic information and analysis.

by the following devices: (1) The incorporation in rupee capital of all com-

According to both authors, there is no question as to whether or not India is going to be industrialized: India's industrial revolution has commenced. The village system, under which each village was a relatively self-sufficient economic unit, is being broken through by the rapid development of communication, economic competition, and education. Under the village system the cultivator and local artisan knew little of modern comforts, but did not miss them. The prosperity of the village was closely tied to the crop cycle. Today the village industries are decadent, while the agricultural aspect remains largely unchanged. This partial addition of the business cycle to the crop cycle has seriously impaired the well-being of the villagers. And the industrial revolution is bound to proceed against all odds; if the people of the country will not take advantage of it, others will. "The only advice which the economist can, under such circumstances, offer to the people would be to ask them to take things as they are, instead of fighting against the inevitable, to profit by the experience of other nations, and to try to minimize the evils of an industrial change. . . . One of the chief means by which the evils of capitalism may be minimized in some degree is the adoption of the principle of coöperation."[1]

Banerjea stresses the social as well as economic importance of small industries even in these days of large-scale production. Sen takes the same position. He writes:

> Even Japan has revolutionized her ancient life by the remodelling of her small and cottage industries. This has been done . . . by instituting a cheap supply of electrical power which enables the Japanese worker to work in his cottage with up-to-date machinery. . . . The Japanese weaver . . . uses the Toyada-loom which is driven by electricity. It is no wonder that his industrial output is ten to twelve times larger than that of the Indian workmen. Thus the Indian system, if it cannot adopt immediately the technique of the West (*sic*), can certainly turn to Japan for a technical example; for it is estimated that more than half of Japan's industrial production comes from the cottages.[2]

It is evidently quite unrealistic to harbor a simple faith that India's industrialization will follow our historical Western pattern. But that is all to the good. As a matter of fact, now that electricity, plastics, etc., have made it possible to decentralize industry, we are ourselves seeking to achieve that toward which Banerjea and Sen would have India advance.

Granted that an industrial revolution is under way in India, does India have a sufficient command over its real resources to carry it out? Not so, according to our authors. But India's economic potentialities are such as to have made it inevitable that supplemental foreign capital has been and will continue to be made available to her. The problem is that of disseminating a clear conception of the limits within which foreign capital is beneficial. From the point of view of democratic political and economic control, as well as from the point of view of conserving India's natural resources: (1) Indian capital should have full scope for investment in Indian industries, and (2) foreign capital should only supplement Indian capital, that is, should not attempt to replace or prevent the formation of Indian capital. Such a policy can be implemented

[1] Banerjea, *Study of Indian Economics*, pp. 112, 113.

[2] Sen, *Economic Reconstruction*, p. 224.

by the following devices: (1) The incorporation in rupee capital of all companies operating in India; (2) adequate provision for the training of Indian apprentices and future managers; (3) the reservation of a proportion of seats for Indians in the directorates of non-Indian companies. In order to prevent this latter from becoming merely a legal subterfuge, indigenous Indian capital must be mobilized. Given the proper safeguards, Sen holds, there is undoubtedly an advantage to having foreign concerns operate plants within India.

In their treatment of the question of foreign capital in India, Banerjea and Sen display a consistently economic attitude. Their protests—made especially in the fields of railways and shipping—are not against *English* or *Scotch* vested interests, but against vested interests as such. Some of our good-willed "sympathizers" with India, who so easily and so publicly lapse into an anti-British attitude on this issue, might learn from our authors. The general reader will sense with relief that Banerjea's and Sen's approach allows one to come to the real point of the issue. On the other hand, he will appreciate why these authors cite with obvious pride the great Tata iron and steel works as an example of what can be done by way of heavy industry, financed by Indians, managed by them along modern lines, and featuring the most advanced labor relations in India. In so doing neither Banerjea nor Sen is indulging in a nationalist pride but is exposing a common fallacy in which historical retardation of Indian managerial skill is confused with an innate lack of ability.

Other common bogeys about the Indian situation are dispelled; for instance, the idea that the caste system is a system in static equilibrium. In fact it is on the way out, if slowly. Crowding it out are the same forces of the industrial revolution which would also render harmless the great religious issues, just as the industrial revolution in England put an end to the expression of social struggle in religious terms. The religious issue cannot be understood without reference to the economic conditions of mass distress. On the problem of Indian population Banerjea quotes with evident satisfaction an Indian economist who said: "The time spent in lamenting the inordinate increase in the population of the poor would be far better spent in arranging effective measures for the removal of their destitution."

On the question of economic control Banerjea is a follower of John Maynard Keynes whom he interprets as saying that "involuntary unemployment" is an inevitable result of an economic system where the rate of interest and the rate of investment are allowed to be determined by uncontrolled competition. Accordingly, private enterprise, unaided, cannot be expected to operate to the extent and in the manner most desirable from the standpoint of employment. Public investment is a very practical necessity in India. It would be very effective in India, because of the large number of persons with small incomes. This means that the value of the Keynesian multiplier (the relation between primary and secondary employment) is high, because in such circumstances a considerable portion of any increment of income will be spent on consumption goods rather than being saved. Here is a valuable, if unintentional, hint to our public financial authorities charged with supporting or controlling the flow of American capital to foreign areas.

Finally, Banerjea advocates economic planning, by which he means first of

all the coördination of various acts of Indian economic legislation to form parts of an organic whole, and coöperation between various provincial administrative bodies, as well as coöperation between these and the central government. He insists on a well-defined aim of planning within practical time limits, and refers specifically to Sir Visvesvaraya's ten-year program for the whole of India. This plan envisages within a ten-year period a doubling of the national income, a considerable increase in the quantity and value of industrial output, and a diminution by 20 per cent of the population supported by agriculture alone. The Government of India act of 1935 has been a very real obstacle to Indian economic planning because it removed the money markets and the transport system from effective Indian control.

Sen's book follows up Banerjea's rather general remarks on economic planning with a wealth of practical detail. Readers who very properly consider the formula "economic planning" taken by itself to have a hollow ring will not be dissatisfied, although there is wide scope for controversy as to the wisdom of the type of administrative planning which these authors tend to favor for India. It may be wise, however, to listen to Indian economists who depict the historical background which must not be ignored in discussing the problem of economic planning in India.

Both books present social value judgments and do not essentially involve objective truths or fallacies; but the precision and integrity with which Banerjea and Sen give practical implementation to their fundamental value judgments are exactly what makes their books such eminent contributions.

GEORGE WILLIAM ZINKE

Washington, D.C.

Latin America. By PRESTON E. JAMES. (New York: Odyssey Press. 1942. Pp. xviii, 908. $4.50.)

"Somehow we must learn promptly to understand and appreciate the other Americans who also live in the New World." By his careful explanation of the "differences which distinguish one group from another," the versatile and experienced author of this book has succeeded in spreading understanding of and sympathy for Latin America. His purpose in writing was to make a "study of human geography." The result is a soundly scientific book, remarkable for many reasons. There are 144 maps and 64 photographic illustrations which provide useful orientation. It is a multilateral survey which makes clear the important factors in the development and present status of the different economic conditions of Spanish South America, Portuguese South America, Mexico and Central America, and the West Indies and the Guianas. A general introduction and a general conclusion containing 66 pages provide concentrated and illuminating answers to the questions "we wish to ask about the people who share with us the protection afforded by a common ocean from the chaos of a collapsing Europe." The bibliography which covers 18 pages lists publications in five languages: English, Spanish, Portuguese, French, and German.

A few of the many questions of interest to economists which are answered in the book are: How does it happen that not more than 8 per cent of the world's population is living in the 8 million square miles of Latin America? How is it, and what economic consequences follow from the fact, that the Latin Americans are grouped in clusters which remain distinct from one another? What explains the existence of 46 cities in Latin America, each with more than a hundred thousand population, in relation to which the population density of the hinterlands is out of proportion compared to Europe or North America? Much is to be understood if one takes into consideration the fundamental physical diversity of the land, which "cannot be described without the use of superlatives . . . but superlatives which are poorly combined in terms of the needs of modern industrial society."

In general each country is treated as follows: One page contains the most important facts upon area, total population, trade per capita, currency and exchange, major commercial products, and railroad mileage. (I suggest that the second edition might contain a little more of such basic information, to include, for example, public finance, trade with the United States, living costs, highways, and air traffic.) The general characteristics of each state are given in a concentrated form. The components of the population and the settlement are explained. The physical character of the land is given in detail, its climate, vegetation, and geological nature. The interdependence of the topography, production, and transportation always is taken into consideration. From such information economic conditions are easily understood. The final part of the study of each country contains outlines of the political situation.

Professor James offers a plastic description of all varieties of the economic man to be found in the vast continent and at the same time the types of man who are not at all "economic" in the usual sense, more inclined to poetry than to economics. In his description, the author's style is often picturesque, as when he describes Paraguay as "a little country that somehow missed being a paradise . . . paradise indeed—for a people who wish to live comfortably and do not dream of great riches. . . . But it takes more than a comfortable climate or a satisfactory soil to lift people out of poverty."

About two-thirds of the inhabitants of Latin America have to be considered "entirely untouched" by matters of trade and foreign commerce. They get only the bare necessities of living and the great majority of them are also illiterate. The other third constitute the governing class, among whom are to be found many persons of wide education and high intelligence. Poor health and malnutrition are widespread in Latin America. There is much lack of energy, much ignorance and apathy; but there are sufficient examples to prove that these defects are remediable and not due to inheritance and climate.

Readers of the book will be freed of the mistaken notion "that the thinly occupied regions to the south of North America contain more undeveloped resources waiting only for the magic touch of unrestricted private enterprise." They will also be saved from assuming that Latin America is "backward" in any simple meaning of the word. A prerequisite to good neighborliness is to judge each country of Latin America in its own terms and to avoid a judgment on the basis of the "North American way of living." It is shortsighted to

apply such words as democracy and dictatorship in their European or North American sense. Such designation "can only bring obscurity."

Professor James is rather realistic in regard to the future course of events after the war is over. Says he: "The time is still too recent when the United States was acquiring territory at the expense of the Latin Americans. . . . The Yankee Peril cannot be eradicated from the minds of the people by only a decade of good neighborliness. Argentina, especially, challenges the right of the United States to dominate—even in the economic field. None of these countries has any sentimental attachment to the United States which could weigh against the practical fact that most of the essential foreign markets for surplus products are to be found in Europe, whether in Great Britain or in Germany." The domination of the English-speaking peoples over the Latin Americans in economic matters or otherwise would be feared no less than the potential menace of the Axis Powers. "These considerations of sentiment are not to be overlooked in planning a new world order." The future, in the author's opinion, more than ever before will be dominated by the industrial city; and "industrial society, welcomed or not, will bring certain changes to Latin America, and those changes cannot long be resisted." The greater productive capacity for each person will bring a fuller life, better diet, better health, better education. "The man or the government that can bring order and coherence out of all the up to now diverse unproductive living elements, will find the real wealth of El Dorado."

Alfred Manes

Indiana University

Statistics; Economic Mathematics; Accounting

Distribution Cost Analysis. By Donald R. Longman. (New York: Harper. 1941. Pp. xix, 280. $4.00.)

"Distribution cost analysis," says Dr. Longman, "is the term commonly given to the study by business men of the effect of the particular methods and tools they employ upon their expenses for marketing goods and services" (p. 1). "Cost analysis" is considered a special branch of accounting, paralleling cost accounting. It is a business tool for the attainment and maintenance of business efficiency. Efficiency is defined "as the attainment of a given objective with the least possible effort or cost" (p. 1). The cost concept used excludes nonpecuniary effort or other yardsticks, and includes only measures that can be directly related to profits. "Cost analysis" is distinguished from "market analysis" in which the influence of market factors on costs are analyzed; and the latter is excluded from the author's analysis.

As a basis for his own suggestions, Dr. Longman presents an excellent, pointed appraisal of the cost categories that have been developed and of the methods of cost analysis currently employed. His own interest is not so much to establish actual costs as to set up standard costs that may be employed to judge (1) the efficiency of the utilization of (a) labor, (b) plant,

1942] BOOK REVIEWS 883

(c) operating executives, and (d) financial resources; and also (2) the influence of changes in the prices of goods and services required for operation, and of distribution policies upon costs of marketing. Although the discussion of labor is mainly confined to measures of performance for repetitive (routine) activities, there is some discussion of nonrepetitive functions. The procedures developed are finally broken down for commodities and customers, units of sale, services (as credit, delivery, alterations, repairs, storage and returns), and transaction types.

A brief characterization of the technical procedures recommended for establishing cost standards for labor, price changes and subcapacity operation will indicate the nature of the author's proposed system. It should be noted, however, that there are numerous additions, variations, and refinements for various purposes. The chief steps in order for repetitive functions are:

1. The accumulation of costs by functions (59 functions are suggested but only part of these would be pertinent in any given case).

2. The segregation for each function of the expenses subject to direct control.

3. The determination of standard costs for labor and materials used in repetitive functions. This involves a job audit, time and motion study, etc.

4. The computation of standard costs for all other expense items.

5. The subtraction of total standard costs from actual costs to establish the degree of efficiency in operation.

6. The determination of the actual average price per unit for expense elements subject to direct control of labor.

7. The determination of the joint loss (or gain) attributable to price changes in both direct and indirect expense items. (This involves several types of computation.)

8. The final determination of the effect of labor efficiency and sub-capacity operation upon cost during the period.

Some variations in procedure are suggested for nonrepetitive functions.

Dr. Longman has anticipated many criticisms of his procedures and presents cogent replies. Furthermore, he clearly appreciates some of the limitations of the results, especially from the standpoint of firm policy. Finally, he appreciates that in many, perhaps most instances, partial and sampling analysis will be adequate.

A treatment as broad and yet as detailed as the author's inevitably gives rise to numerous general and specific criticisms. So far as criticisms of detail are concerned, they should result from attempts at application of the procedures by the author and others. There can be little doubt that experience will produce many adjustments. In general terms the following comments and suggestions, it is hoped, will have some constructive value:

1. It was unfortunate to consider cost analysis merely as a branch of accounting. In the reviewer's opinion the best work in this field will derive from a combination of cost accounting, economic analysis, and common sense. Dr. Longman gives abundant evidence of good judgment and balance and of familiarity with cost accounting; but for some reason he was unwilling

to use the tools of economic analysis in an overt manner. Even if he was writing chiefly for cost accountants, marketing specialists and business men, it should have been feasible to have related his work more definitely to economic analysis.

2. There is not sufficient indication that the author realized that the standard cost procedures suggested involve a considerable subjective element.

3. The inherent differences between the cost problems of producers and of distributors are not noted except to point out that only that portion of the general method need be employed for any given firm which is applicable. But the problem is not so simple for manufactures, because production and marketing costs are organically interdependent, and consequently distribution policies should not consider merely the latter.

4. By refusing to enter the area of "market analysis" in addition to "cost analysis" as defined, the author places his analysis on an unnecessarily static and semi-arid plateau. Market and cost analysis need to be employed together when feasible if full and realistic results are to be achieved.

These general criticisms are by no means to be interpreted as suggesting that the author has done a poor job. Dr. Longman has boldly invaded one of the least explored and most treacherous areas of investigation. He is to be congratulated for the initiative, originality, and vigor shown in his work. Undoubtedly his analysis and procedures will have front-rank significance in the developments in this field.

E. T. Grether

University of California

Inventory Valuation and Periodic Income. By Carl Thomas Devine. (New York: Ronald Press. 1942. Pp. vii, 195. $3.00.)

For some years there has been controversy among accounting scholars and practitioners on the relative merits of the several inventory valuation concepts. This controversy has been intensified lately for several reasons. The announcement of accounting "standards" in which the strict cost concept was advocated by the American Accounting Association stimulated the discussion, and practitioners have been given to self-searching and to improving themselves before the public as a result of the widespread criticism they received after the McKesson-Robbins case. Increasing income tax rates have given impetus to inventory valuation methods calculated to reduce the fluctuation of earnings between years, and proponents of these methods have been especially vociferous.

The discussion has been considerably confused by differing viewpoints. Writers have generally tended to emphasize the needs and uses of either the balance sheet or the profit and loss statement, and they may be characterized by a failure to observe fully the interdependence of the two fundamental accounting statements and to rationalize their contentions in terms of both. The title of the work under review testifies to the author's consciousness of this necessity and to the recent growth of emphasis upon the computation of income. The book thoroughly explores the effects upon periodic income of the

prominent inventory valuation methods—identified unit cost, replacement cost, and "cost or market, whichever is lower," as well as their subsidiary variants.

In this connection it should be observed that the study is made from an accounting point of view and that the author's announced purpose of determining "the possible consequences of each cause of action" is directed at the effects produced in the accounting statements. His other avowed purposes —to estimate "the probable reactions of those reading the accounting reports" and to test the desirability of the probable reaction "by reference to certain broad social standards taken from the general fields of business administration, economics, sociology and psychology"—will appeal to economists as desirable objectives, but their accomplishment is almost completely submerged in the delineation of the mechanical effects of the several accounting policies.

Those interested in the effects of accounting methods upon business reports and sentiment will find in the book a thorough investigation of the accounting aspect of these questions which goes somewhat beyond the rôle of inventory, since the author begins with the problems of revenue measurement and recognition, and proceeds through a discussion of the inventory process to the particular methods. Under the heading of cyclical behavior, charts have been presented which are derived by the application of six different inventory methods to the inventory data of an actual cotton mill for the years 1933-1938. The methods illustrated are cost or market, current market, first-in first-out, average cost, base stock and last-in first-out. The amplitude of the curves is less for the last three methods and least for the last one, as is to be expected from theory. Too many variables are involved to make a simple summary of conclusions possible.

To the accountant the book is notable for its completeness and objectivity in a field where advocates abound and the disinterested appraiser is rare. Of special significance is the author's recognition that the oft-criticized rule of thumb of practice—"cost or market whichever is lower"—is not without a theoretical defense. The author's conclusion upon the controversy regarding the various methods of income computation, and, by inference, upon the desirability of establishing any one rigid formula, is recommended to all parties and is reproduced herewith: "In light of these numerous alternatives is it possible that one (and only one) of them yields the 'true' profit and all others lead to false income figures? The naïveté of such a rigid position is obvious."

LAWRENCE L. VANCE

University of California

Business Cycles and Fluctuations

Unused Resources and Economic Waste. By DAVID ROCKEFELLER. (Chicago: Univ. of Chicago Press. 1941. Pp. ix. 260. $2.00.)

This essay is concerned with the problem of unused capital resources rather than with labor and the former is presumed to include all resources whose exploitation could be [is] undertaken "according to the cost principle." The essay is concerned with the logic and rationale of the concept of unused

resources rather than with the statistics of possible additional production. In addition to a brief account of the history of the concept under discussion and summary remarks on certain institutional factors, the bulk of the book is devoted to a statement of the allocation and utilization of capital resources under competitive and monopolistic conditions. To those familiar with the apparatus of economic analysis the above statement will suffice as an indication of the content of the book.

It is not surprising that the discussion of the subject matter of this book has been stimulated by depressed economic conditions and particularly by the depression of the thirties. And yet this book and many related to it are concerned primarily with the possibility of greater production than is achieved in our most prosperous periods. Possibly one of the chief weaknesses of the book is its failure to relate or to distinguish the principles which explain why capital resources are used less at some times than at others from the principles which explain why they are never used more than they are. Apparently the author on the whole believes that the economic system can be justified for not having operated at higher levels in times of prosperity but cannot be justified for having operated at such low levels in times of depression.

The author has selected for particular analysis three studies of production capacity: Harold Loeb's *The Chart of Plenty;* the Brookings Institution's series of studies beginning with *America's Capacity to Produce* and ending with *Industrial Price Policies and Economic Progress;* and the National Resources Committee's *Patterns of Resource Use.* The merit of these works is judged to be in the reverse of the order named. However, he finds them all to be highly unsatisfactory.

Quite aside from any criticism of the measurements used, waste cannot be judged from economic measures alone. Political institutions are ends in themselves and economic products received must be evaluated along with the relative desirability of political institutions which are necessary to produce the products. The last chapter gives proper emphasis to the elusive character of the whole notion of waste.

Mr. Rockefeller has produced an able critique of attempts to measure the amount by which the economic system has fallen short of its potentialities, with due recognition of the possible social cost of achieving a greater economic production.

HOMER JONES

Washington, D.C.

Public Finance; Fiscal Policy; Taxation

Fiscal Planning for Total War. By WILLIAM LEONARD CRUM, JOHN F. FENNELLY and LAWRENCE HOWARD SELTZER. (New York: National Bureau of Economic Research. 1942. Pp. xxv, 358. $3.00.)

The authors of this report constituted the Directing Committee of a study commissioned by the Conference on Research in Fiscal Policy, which in

turn is sponsored by the National Bureau of Economic Research. The report is based on the work of an active staff of fourteen professional members, assisted by several special collaborators and a long list of consultants.

The chief use of the report will be as an analytical handbook for students of fiscal policy. It is too concentrated and technical to appeal to non-professional readers, and it does not attempt formulation of concrete and specific policy recommendations. But it succeeds brilliantly in locating the considerations which matter in each phase of the fiscal problem, and in tracing cross-relations. Particularly in these days when scholarly leisure has almost disappeared from the market, a check-list of these considerations and cross-relations is a very useful asset for the student.

The book falls into two main parts. Chapters 1-5 deal with the relation of war finance to its "real" setting; chapters 8-12, with taxes of various sorts. Chapter 6 (Desirable Amounts of Taxation and Borrowing) and chapter 7 (Taxation: Needs, Limitations, and Possibilities) afford a transition. Chapter 13 (Government Borrowing) might well have been treated as an appendix.

The first two chapters relate the war effort to the national product, following roughly the procedure of the recent articles in the *Survey of Current Business*. This involves making war expenditures and national product comparable—an adjustment without which the unwary frequently arrive at the paradox of war expenditures and consumption more than exhausting the product—by adding depreciation, depletion, and business taxes to national income. The reader should be warned that the "1943" estimates presented on page 47 relate to the fiscal year 1942-43. Incidentally, figures published since the report went to press indicate that the authors' estimates both for 1942 and for 1942-43 were considerably too low both for consumption and for military outlays. This is not too serious, of course; the figures are useful to indicate the general magnitude of the problem and to illustrate analytical procedure, and the authors presumably intended no more.

The third chapter brings in estimates of income distribution by size to illuminate the fiscal problem. Again the estimates, regarded as forecasts, are too low. The 109 billion-dollar level of individual money income forecast for fiscal 1942-43 was actually passed in the spring quarter of 1942. But the procedure of breaking down consumers' "desired expenditures" (those they would make if unlimited supplies of consumers' goods were available at current prices, given consumers' money incomes) by income level is revealing. Details of procedure are not fully described and, in any event, the availability of income and expenditure data for 1941 and 1942 (collected by the Bureau of Labor Statistics and the Bureau of Home Economics) will make it unnecessary in future to go back to 1935-36 for data as the authors were obliged to do. In principle the procedure sketched in the note on page 67, applied to the new data, should lead to respectable first-approximation results; though it is hard to reconcile the authors' figures with the record for 1941. They estimate "desired expenditures" for a 109 billion-dollar income level at 78 billions; since they estimate personal taxes at 1941 rates at 7.3 billions (p. 172), this expenditure corresponds to a disposable income of

102 billions at April 1942 prices. By valuing the 1941 income at 1942 prices,[2] consumers received 103 billions, had a disposable income of 96 billions, and spent 82 billions. This discrepancy may reflect some first-magnitude bias in the procedure; but the reviewer is inclined to attribute it to the defects of the 1935-36 base for extrapolations to a level of income nearly two-thirds higher.

The fourth chapter discusses "The Role of Finance," making the usual point that a realistic anti-inflationary policy of war finance does not increase but rather decreases the hardships of the public, but making the point unusually well. The fifth chapter analyzes the "Direct Controls" available for steering economic mobilization. Here again the ideas are common property of the economic profession; but, except for a lack of stress on consumer rationing, the emphasis is admirably distributed, and the discussion of the inter-relations of direct and fiscal controls (which of course is the purpose of the chapter) is most helpful.

Chapter 6, on "Desirable Amounts of Taxation and Borrowing," is the high spot of the book. The concept of a "spending balance" from which it sets out makes an excellent focus for analysis of the problem of wartime deficit financing. The analysis of the drawbacks of heavy public debt (pp. 140-44) is masterful, and well balanced against the arguments for a post-war backlog of spending power. The section on adverse effects of drastic taxation (pp. 144-51) puts a great deal of substance into the rather vague fears often expressed by business men and congressional leaders; though the expressing of a preference for taxes over compulsory loans (pp. 162-66) implies that the authors do not think incentive considerations make it impossible to levy sufficient taxes to block inflation. A very interesting study of the positive benefits of a wartime deficit is offered on pages 155-59. The upshot is that certain (gross) savings are necessary to keep individuals from being frightened by their inability to maintain life insurance, retirement plans, mortgage payments, etc., and to provide for depreciation of capital goods which cannot be made good in physical form under war conditions. About 20 billion dollars per year is suggested (p. 159) as an "ample" figure for this purpose.

The second transitional chapter is a general view of the tax system. Subtracting the 20 billions of borrowing suggested above from estimated expenditures "leaves some 55 billion dollars as one tentative goal of a tax program for the fiscal year 1943, with the possibility that it can be substantially lower, perhaps as low as 40-45 billions without necessitating inflationary borrowing." The revenue situation under the Revenue act of 1941 is analyzed (pp. 171-80); and the revenue is found to be inadequate and designed to come in with too much lag—objections which still apply under the 1942 Revenue act. At the end of the chapter are offered three "possible combined tax plans" (pp. 182-84), promising yields of about 12 billion dollars above the 1941 Revenue act, or 3 to 5 billions above the 1942 act. The authors point out (p. 185) that this "is $10 billion short of the tax goal of $40 billion indicated earlier in this

[2] See my article, "What It Takes to Block Inflation," *Rev. of Econ. Stat.*, Vol. 24 (Aug., 1942), p. 103.

chapter as a rough minimum," but offer no suggestions except that a "combination of new taxes which would cut down this dangerous gap of $10 billion would necessarily comprise even more severe rates than those illustrated."

The chapters which follow discuss in succession taxes on corporations, indirect taxes, and taxes on individual incomes. The chapter on corporation taxes, unfortunately, does not go into the question of recapture of profits by renegotiation of contracts, which appears likely to be of great importance; but otherwise it remains as relevant as before the 1942 Revenue act was passed. Chapter 9, on indirect taxes, seems to favor much heavier use of excises and also a general sales tax; it offers an impressive list of reasons in favor of such a policy. Several serious arguments against sales taxation, however, are omitted, in particular: (1) the administrative overload on the Bureau of Internal Revenue which has to adapt itself to handle taxation of incomes at the source; (2) the nullification of much of the income-absorbing effects of such taxes by cost-of-living allowances in wage determination; (3) the overload on the price-control machinery of adapting ceilings to new indirect taxes; (4) the fact that much sales tax revenue is likely to come from marginal profits—*i.e.*, to the extent of 80 per cent from potential corporation tax revenue; (5) the fact that raising a billion dollars of such revenue seems to take about a month of consideration from congressional committees, holding up action along more promising lines.

The chapter on taxing individual incomes handles admirably the question of incentives, except for the case of taxes on "excess incomes" of individuals (increments since a base period), which at several points in the book are treated much too indulgently. On pages 256-62, three possible rate schedules are considered. Their shape is intended to reflect incentive considerations previously discussed; but the authors themselves seem somewhat uncertain that those considerations can be interpreted quantitatively. A hint is dropped on page 259 that schedule A is likely to be the most drastic schedule "feasible at present"; but no argument is presented. The less drastic schedule B actually matches rather closely with the schedule enacted in 1942 (if the 2 per cent increase in normal tax, which our authors do not commend, is added in). The increase in revenue of Schedule A over 1941 rates is placed (p. 262) at 2 billions, one billion above Schedule B. A reduction of exemptions (to a level about that of the 1942 act) is estimated on page 264 to yield 2.2 billions. Limiting the benefit of exemptions to the first bracket taxable is estimated on page 265 to yield 0.2 billion. The only figure offered for the effect of requiring joint returns (p. 268) is about 0.3 billion. Eliminating some deductions is estimated (p. 274) to yield 0.2 billion, eliminating tax exemption (p. 275), over 0.2 billion. These possibilities add up to about 5 billion dollars—not much more than the yield of additional personal income levies included in the Revenue act of 1942.

If the quantitative side of the tax chapters must be accepted as exhausting the nation's revenue opportunities, the outlook is black indeed. But there is strong evidence that the authors of this report have underrated the income tax. In calendar 1943, the incomes citizens receive will total some 125

billions, of which under 15 billions will go for personal taxes. It stands to reason that somehow a levy can be designed to capture at least double this proportion without undermining necessary work incentives. Rather than accept the conclusion implicit in this report—that we can only carry out the war production program by tolerating inflation to provide "incentives"—we should do better to abolish income tax exemptions and levy on the whole income, which would surely yield enough revenue. But we need not go so far. From study of the distribution of income by size it appears that we can subject half the national income to tax (allowing for deductions and exemptions) by fixing exemptions to make two-thirds of the nation's families taxable, two-thirds of income by making four-fifths of the families taxable. To control inflation, we need from income taxes some 30 billion dollars—say, a quarter of income. With two-thirds of income taxable, this implies an average rate on taxable income of about 40 per cent; with half taxable, 50 per cent. The exemption necessary would be about $1000 of net income for an average family.

As the authors put it, "inflation is rarely chosen as a deliberate policy. It is rather the result of ignorance, drift, practical obstacles to alternative courses, and political weakness" (p. 93). If we economists are not to share responsibility for such an outcome, we must go beyond the furthest stage reached in this report and outline tax programs which really would yield at least the minimum necessary revenue. But in doing this job we shall find the report a very useful guidebook.

ALBERT GAILORD HART

Iowa State College

Money and Banking; Short-Term Credit

Our Modern Banking and Monetary System. By ROLLIN G. THOMAS. (New (York: Prentice-Hall. 1942. Pp. xxiii, 812. $4.00.)

Despite the fact that modern economic theory has been characterized by a recognition of the significant rôle which money plays as an activating influence in the functioning of an economy, there has been a noticeable lag in the speed with which new ideas in monetary theory have found their way into money and banking texts. Professor Thomas has made a valuable contribution to worth-while teaching of money and banking, therefore, by writing a text which goes beyond the quantity theory and the technical details of money and banking and aids its readers to understand the important position of money in the modern theory of value and price. In accomplishing this objective he has avoided the usual practice of studying money and banking *in vacuo* and has succeeded to some extent in weaving monetary and banking theory into the body of general economic theory.

The material of the book falls into two major divisions. The first (chaps. I-XXIX) is devoted to a description of the nature and operation of our money and banking system and is designed to accomplish three things; namely, to

provide an understanding of the monetary mechanism, to supply the basic, elementary information required for an intelligent approach to the banker-customer relationship, and to describe contemporary banking institutions and practices. The second major division (chaps. XXX-L) deals with modern monetary theory and problems. It represents an attempt to guide the reader through the "recognized" theories of money and prices, with stress on their "complementary" rather than their "controversial" nature. As Professor Thomas explains, "an attempt is made to harmonize the several approaches and to use them in elucidating the central problem of price level behavior" (p. vii). A considerable space is given to the fundamental question of international price relationships, under both gold and paper money, as a basis for weighing the arguments for and against monetary nationalism. Finally, the problem of appropriate monetary and central bank policies is discussed, with emphasis on their contribution to economic stability. In general, the organization of the book is intended to integrate the material for a coördinated course in banking, money, and the theory of prices.

A chapter-by-chapter examination of the first major division of the book would be not only an overwhelming task, but it is unnecessary. The material consists of an orthodox presentation of the technical aspects of money and banking. Running through these chapters is a current of theoretical discussion which sometimes serves to relieve the monotony of the mechanical details. There are several general criticisms which can be made with regard to the first division. From the viewpoint of readability and teachability many of the first twenty-nine chapters are very well done, but several others are of an inferior quality. Between the better chapters and the poorer ones there is an unusually wide spread. Illustrative of the poorer ones is chapter V, "The Nature of a Bank," a somewhat forbidding account written in a sketchy, outline fashion. Chapter VI, "The Banker and Credit Instruments," is subject to the same criticism. Perhaps the least adequate of all the first twenty-nine chapters is chapter VIII, "The Guaranty of Bank Deposits." It is a superficial treatment of deposit insurance couched in tiresome, legalistic terminology. The outstanding development in connection with federal deposit insurance, namely, the realization of 100 per cent insurance coverage for each depositor via the "loan and purchase" powers of the Federal Deposit Insurance Corporation, is completely ignored. To a lesser degree several other chapters are open to similar criticism. In many places the reading degenerates into a superficial, bare-outline presentation of the material. Fairness demands, on the other hand, an acknowledgment that, judged by the standards of content and teachability, several of the chapters in the first division are high grade, especially chapters IX, X, XIV-XVI, and XXII-XXIV.

The treatment of commercial bank deposits leaves much to be desired from the viewpoint of teachability. The exposition is not sufficiently pointed, it tends to be confusing, and it relies too much on the student's imagination. It is stated briefly on page 13, for example, that a commercial bank "creates" demand deposits, on page 53 the bank "lends" deposits, on page 55 it "creates" them, and on page 75 it "lends" them. The discussion shuttles back and forth between "loan-created deposits" and "cash-deposits" without a clear explana-

tion of the difference between the two. The distinction is made clear on page 80 in a brief paragraph entitled "Creation of a Deposit," but it is done in such a casual manner as to leave the reader uncertain about which type is the more important of the two. Following the above-cited paragraph, which merely mentions the creation of deposits, discussion of loan-created deposits is postponed until chapter XVII, "The Volume of Bank Credit." Here, at last, the reader finds a presentation of the multiple expansion of commercial bank deposits on the basis of fractional reserves. The exposition could be much more helpful to student and teacher, however, if the well-stated principles were clothed with much more illustrative material. It would seem that the great importance of commercial bank deposit creation renders it imperative that the student be drilled in all its complexities by means of a wealth of illustrative material in the text as well as in the classroom.

The splendid work which Professor Thomas has done in the second major division of his book, that dealing with monetary theory and problems, more than compensates for any shortcomings of the first division. Most of the material reveals precise thinking, exhaustive research, and a keen interest in the subject. Clarity in style, skill in simplification, and thoroughness in discussion make the second part eminently satisfactory for student and teacher alike.

The first six chapters of the second division are especially well done. Without side-stepping any of the difficulties involved, Professor Thomas provides his readers with the fundamentals of recent monetary theory. The ideas of Keynes, Hawtrey, Robertson, Wicksell, Ohlin, and others, are all put forward in a most teachable manner. Chapter XXX begins the study of money and price theory with a consideration of price movements and their consequences. It supplies an excellent treatment of such subjects as the measurement of price changes, price dispersion, and the effects of changes in the price level. The only sour note is the unqualified adherence to the old chestnut that in a period of rising prices real wage rates fall because commodity prices climb faster than money wage rates (p. 470). The work of Dunlop, Tarshis, and others proves that at least over a considerable range of rising commodity prices, real wage rates may increase as well as money wage rates. Chapter XXXI is a brief but helpful introduction to the theory of the value of money. It lays the foundation for subsequent discussion with a clear explanation of the transactions and cash-balance approach to the demand for money. Chapter XXXII continues the consideration of the theory of the value of money with an intensive discussion of the usefulness of the transactions equation and the cash-balance equation (Keynes's and Robertson's formulations) as devices for analyzing the relation between the quantity of money and the price level. Chapter XXXIII, "The Income Approach to the Value of Money," successfully explains the relation of total money income to the quantity of money, Hawtrey's approach to the relation between the quantity of money, money incomes, and the price level, and Keynes's early ideas (*Treatise on Money*) on the inequality of saving and investment as the cause of changes in the price level. Keynes's views are very well illustrated by means of graphic examples. With admirable lucidity and succinctness Professor Thomas sets forth in chapter XXXIV the

ideas of Keynes in his *General Theory*. Graphic examples are again of aid in the interpretation of Keynes's theory concerning the equality of savings and investment and the multiplier principle. Chapter XXXV is an excellent discussion of the rate of interest and the price level, with special emphasis on the views of Hawtrey and Keynes.

There is no need to enter upon a detailed account of chapters XXXVI-L. The high quality of previous chapters is sustained throughout a consideration of such subjects as international price relationships under both gold and paper money, monetary nationalism versus internationalism, and appropriate monetary and central bank policies with respect to economic stability. The only possible adverse criticism is that perhaps too much space is devoted to the international gold standard.

JAMES J. O'LEARY

Wesleyan University

El Banco de la Nación Argentina en su Cincuentenario. (Buenos Aires: Privately printed. 1941. Pp. xiii, 473.)

The Bank of the Argentine Nation published this commemorative volume, with an introduction by its president, Jorge A. Santamarina, on its fiftieth anniversary. The Bank, established in 1891, when Argentina was in financial collapse after the great foreign borrowing of 1880's, has played an important part in the economic life of the country in the half-century that has seen the emergence of Argentina as a modern nation. The volume itself, beautifully printed and illustrated, is, even to the reader who does not know Spanish or is not interested in banking history, a symbol of the development of Argentina.

Like many commemorative bank histories, the book makes no pretentions to extended economic analysis, but it has much of value both to the monetary economist and the economic historian. The first third deals with the period before 1891, and reprints the text of many early laws and decrees on money and banking. American readers will note in the struggles over the Banco Nacional, which was established in 1826, the refusal of the government to renew the charter in 1836, and the subsequent use for many years of the mint as the banking agency of the government, a similarity to the history of the Second Bank of the United States and the Independent Treasury. The system of bond-guaranteed bank notes, established in 1887, was modeled on our national banking system. A detail of economic history mentioned, and one that might well be pondered by those who take a static view of our economic relations with Latin America, is that in its early years Argentina imported wheat from the United States. Among the many plates in the book is one of an early bank note of the Banco de Buenos Aires, printed in the United States and carrying the portrait of George Washington.

The remaining two-thirds of the book deals particularly with the Bank's activities, but it also has considerable material on the development of Argentine monetary and banking policy since 1891. The text of presidential messages, of reports of ministers of finance, and of parliamentary debates relating

to the Bank, and extensive statistics on banking operations, make the volume particularly useful to a reader who does not have access to detailed Argentine sources. Among other material are the names of all presidents, vice presidents and directors of the Bank since its establishment; the date of the establishment of each branch; provincial and territorial maps showing the location of the branches, brief statistical statements on each province and territory, and data on the Bank's operations there.

FRANK WHITSON FETTER

Haverford College

International Trade, Finance and Economic Policy

America's Strategy in World Politics: The United States and the Balance of Power. By NICHOLAS JOHN SPYKMAN. (New York: Harcourt Brace. 1942. Pp. 500. $3.75.)

"Because of the distribution of land masses and military potentials, a balance of power in the transatlantic and transpacific zones is an absolute prerequisite for the independence of the New World and the preservation of the power position of the United States. There is no safe defensive position on this side of the oceans. Hemisphere defense is no defense at all. The Second World War will be lost or won in Europe and Asia. The strategic picture demands that we conduct our military operations in the form of a great offensive across the oceans. If our allies in the Old World are defeated, we cannot hold South America; if we defeat the German-Japanese alliance abroad, our good neighbors will need no protection. . . . The interest of the United States demands not only victory in the war, but also continued participation in the peace. . . . Basically, the new order will not differ from the old, and international society will continue to operate with the same fundamental power patterns. It will be a world of power politics in which the interests of the United States will continue to demand the preservation of a balance in Europe and Asia" (pp. 457 and 461).

That is the fundamental thesis of Professor Spykman's book. It is an important and, in some respects, a brilliant book. It makes certain important truths about the working of a system of power politics, and their meaning for America, crystal clear. An understanding of these truths is important for economists. Many of the crude and fallacious "economic" explanations of state behavior stem from ignorance of them. Had some Americans been less naïve on these matters we might have been spared the grievous blunders (and the nearly disastrous effect on our policy in the middle thirties) associated with superficial economic interpretations of our entry into the First World War. The driving home of the balance of power principle—a principle which any great state in a power-politics world neglects at its peril—and its detailed exposition in terms of the "grand strategy" of America's relations to other parts of the world is Professor Spykman's greatest contribution.

The more specifically "economic" material appears mainly in connection with the problem of how well the Western Hemisphere or some portion of it could be defended were the balance of power to be abolished in Europe by a Hitler victory and in Asia by a Japanese victory. Almost half the text is taken up by this discussion and the whole book is focused on it. There are three economic chapters: "The Economic Pattern of the New World," "Mobilization of Natural Resources," and "Economic Integration." The analysis here is ably presented and the conclusions are sound. Mr. Spykman holds that an Axis victory would result in supranational units of continental dimensions against which "the United States alone would be powerless to exert effective pressure in spite of her overwhelming strength in a world of national states" (p. 300). In the Western Hemisphere, "nothing less than the creation of a single *Grossraumwirtschaft* incorporating the whole hemisphere and administered on the basis of a planned economy with regulation of production and central control of international trade could stand up against such concentration of power." Yet the chances of achieving such an integration by voluntary coöperation would be very small indeed, and the German-Japanese alliance would possess powers of economic coercion over certain states of South America superior to our own. "Unfortunately both geography and economic history have conspired to make the Americas unsuited for integration" (pp. 338, 341). The argument correctly emphasizes that the basic economic problem of Western Hemisphere isolation, from the power point of view, lies in an export surplus, mainly agrarian, that the United States could never absorb and that could not be readily converted to other forms of production.

There is a good statement (pp. 293-94) on the limitations of past research into problems of raw material procurement and on the relativity of raw material needs to shifting types of warfare. On page 299 some misleading impressions, which might have been avoided by using percentages, are given by a list of commodities which a victorious Axis could withhold. Nickel is listed as a material that Japan might control in Oceania, although more than 85 per cent of the world's nickel has been supplied by Canada in recent years and only relatively small amounts come from New Caledonia. The account of stock-piling in the United States (p. 312) does not seem sufficiently critical of actual accomplishments. On page 314 and elsewhere it would be well to point out that power is always *relative*, so that "an adequate war industry" is a hazy concept. The statement on page 325 that the commercial policy favored by the United States Department of Agriculture was in "complete contradiction" to Mr. Hull's policy is much too sweeping. Terms like "overpopulated" and "favorable balance" are sometimes used uncritically (p. 273), and the implied explanation of capital exports in terms of national production outrunning national consumption (pp. 256, 280) is overly simple. The trenchant observation on page 332 that "loans create neither gratitude nor dependence. . . . Not favors already received, but favors still to be received create for the donor a position of influence and power," is worth underlining.

Considered simply as a treatise on how to play the game of power politics, and not on the issue of what America's basic strategy in world politics should be after the war, Mr. Spykman's book deserves high praise. Even so, it has

blemishes, some of them serious. The "geopolitical" approach tends to distort reality by exaggerating certain aspects of reality and suppressing others. Of course, it is not inherent in a proper appreciation of geographic factors to underestimate the importance, even for the most hard-boiled power politics, of social institutions and traditions, freedom and slavery, the hopes and fears of human beings, right and wrong. Mr. Spykman has been accused, with some justice, I think, of underweighting these intangibles. There is danger of "geopolitics" becoming something of a fad, a magic word of incantation supported by other magic words like "heartland." An interesting slip, for a book based on the thesis that geography is "the most fundamental factor in the foreign policy of states," occurs at page 134. The Amur River is made to reach the coast at Vladivostok on the Japanese Sea, whereas its real outlet is eight hundred miles farther north, near the northern tip of Sakhalin.

In the great debate which was at its height while Mr. Spykman was writing this book, "hemisphere defense through hemisphere isolation became," as he says on page 6, "the new streamlined version of the old isolationist position." *America's Strategy in World Politics* very effectively and exhaustively demolishes that new isolationist position and builds probably the most thorough and conclusive case yet presented on strategic grounds for an active policy of American participation in transatlantic and transpacific affairs. Before the book was in print, however, the immediate issue had been settled. The decision between offensive and defensive war strategy, to which Mr. Spykman also applies his argument, has likewise now been taken.

The question of war objectives and post-war policy remains: "Is the world beyond the oceans one from which we can withdraw after victory as we did in 1918, or one whose fate is inescapably interwoven with our own?" (p. 7). Even this question, in the bare form of withdrawal *vs.* participation, may be fairly well settled by now, judging by statements of public officials and trends of public opinion polls. The real issues still to be decided, and the ones toward which thought and discussion need to be shaped up, concern the *manner* and the *objectives* of our participation. It is at this point that I find Mr. Spykman's book definitely unsatisfactory. He reaches conclusions on these points. But they are almost *obiter dicta*—brief, dogmatic, not well thought through, and not well supported by careful argument. In some respects they are out of accord with the analysis advanced elsewhere in the book. Has the author given only cursory attention to these problems? May we hope that he will return to them and, by applying his demonstrated powers of analysis, remove some of the weaknesses and inconsistencies in his present position?

Specifically, Mr. Spykman advises America to play the old game of nationalistic balance-of-power politics along the old lines. He does advocate some improvements in techniques, such as creation of states of more homogeneous size, and use of leagues of states as a framework for the operation of the politics of power. He would have us regard our present friends as potential enemies and, for example, take care that China does not overbalance Japan in the Far East. Elsewhere in the book (Chapter I) the author's own analysis shows that the game of power politics must lead to recurrent wars. The "balanced power" which we are advised to make our objective is "inherently

unstable" because each state really wants an overbalance in its own favor, because there is no reliable measuring stick for power, because the elements contributing to it are not static but dynamic, because states may upset calculations by suddenly changing sides, and because not all statesmen who play the game of balanced power are good technicians (pp. 21-25).

Even this formidable list of reasons why Mr. Spykman's formula will not work is deficient. He does not add, but ought to, that democracies are not well adapted to playing the balance of power game, because they are not cold-blooded enough to change their friends and enemies in time to preserve equilibrium, and because they are loath in time of peace to devote their economies and their educational systems to the arts of war. Reliance on the balance of power principle as anything more than transitory re-insurance while we are establishing and perfecting some system of world government is handing over the future to the fascists of the world, even if we do defeat them in this war.

Furthermore, Mr. Spykman appears to be totally unconscious in this connection—though he sees it in other connections—of the fundamental changes which the evolution of the modern industrial system has wrought in the workings of power politics and the possibility of a balance of power. In the days when the classic balance of power theory arose, and even through the nineteenth century, sovereigns could fight wars of limited objectives without disturbing very greatly the economy or the civilian lives of a large proportion of their subjects. The mechanized warfare of today, where the military forces have become the cutting edges of gigantic industrial machines, has changed all that. Adequate preparation for war nowadays means conversion of the whole economy to military purposes. A peaceful civilian state cannot in the future count on its wealth as a "power potential" to defend it against lightning war by militarized states. If one state militarizes its economy, the others will have to do so for protection. Power politics in an era of total war is incompatible with the existence even in "peacetime" of civilian welfare economies. Mr. Spykman puts it well himself on page 40: "Total war is permanent war."

To all this he would doubtless reply that admittedly the balance of power system leads to recurrent wars, and admittedly war is "unpleasant" (Mr. Spykman's word), but "In an international society in which states are intent on preserving their independence, both against world conquest and against world government through federation, balanced power is the only approximation to order" (p. 25). This last statement correctly states the alternatives, but in my opinion it exaggerates the possibilities of even an approximation to order in the future through balanced power. Mr. Spykman's "realism" is in this respect the realism of past centuries. Under the conditions of the middle and late twentieth century the first two alternatives (world conquest or world federation) are most likely to be the only two left— because of the rapidly developing technology of transport and communication, because of modern large-scale industrial and political organization (including organization for war and conquest), and because of the great difficulty under modern conditions of changing back and forth between war economy and peace economy.

The realistic outlook is for some form of concentration of world power through conquest or through federation, or through a combination of the two. "Balance" among independent power units is out. Frederick L. Schuman in his *International Politics*[1] shows that previous state systems have ended in conquest by a strong state which upset the "balance" and overran the whole of its world. The Western State System, through an era of unprecedented economic development and geographical expansion, has thus far been an exception to this rule. It is unlikely to be an exception much longer, unless world government through federation supersedes power politics, thus averting the otherwise inevitable drift from unstable power balance to the Third World War and the ultimate triumph of a Caesar.

This is not to say that the balance of power principle can be neglected with safety in the arrangements after this war. In my native state of Nebraska the first stories of a fine capitol building were erected *around* the old capitol. Only when the offices had been moved into the new structure was the old one torn down and hauled away. Something similar should be Amerca's strategy in world politics. We have to play the power politics game, but our constant aim should be to hasten the day when world government will supersede power politics.

Three egregious errors in Mr. Spykman's discussion of these issues remain to be pointed out: (1) He uses the word "power" in several different senses and sometimes passes unconsciously from one to the other. This logical fallacy allows him to argue that, because we have log-rolling for voting "power" and even have struggles for "power" in ladies' sewing circles and Christian Endeavor societies, we may as well reconcile ourselves to a constant struggle among national states for military "power" (pp. 11-14, 458). (2) A closely related error, and one amazing in a political scientist, occurs in his sixteen-line discussion of "world federation" (p. 458). It is perhaps just as well that world federation is still far off, because "the world state would probably be a great disappointment . . . the struggle for *power* would continue. Diplomacy would become *lobbying* and log-rolling, and international wars would become civil wars and insurrections, but man would continue to *fight* for what he thought worthwhile and *violence* would not disappear from the earth." Is not the whole benefit of organized government wrapped up in substituting one kind of struggle for "power" for another, and in creating a situation where men "fight" for what they think worth while by log-rolling (and, at times, by reasoned argument) instead of violence? Does not experience show that men are more likely to be able to practice the economics of welfare (instead of the economics of power) under a system of organized government, despite occasional civil wars and insurrections, than under the unstable "balanced power" of a system of anarchic sovereignties—especially in these days when "total war is permanent war"? (3) "Illustrations of international coöperation and limited confederation are many, but there has never been a case of the actual transfer of military power and political authority from individual

[1] This is the best book to give economic students needed background on power politics and, hence, on power economics, especially chap. 7, preferably supplemented by chaps. 1, 2, and 13 (3rd ed.).

states to the organs of an international community" (p. 16). This statement is either tautology (an international community ceases to be international if enough military power and political authority are transferred to its organs), or it is untrue. What about the thirteen states that united in 1789? Switzerland? The unification of Germany? Of Italy? Political integration is one of the most notable processes in history. Most often it has come by conquest, less often by consent. By one or the other form of the process, "international relations" in countless instances have become "domestic relations" and peace has become usual within areas where war was endemic before. The Greek cities used to make war on each other. Gascony used to war against Burgundy. If American interests include democracy, political stability, and welfare economics, then our wisest strategy in world politics is to promote, preferably by consent, the age-old process of political integration, this time on a world scale.

EUGENE STALEY

Fletcher School of Law and Diplomacy, Tufts College

Business Finance; Insurance; Investments; Securities Markets

Modern Corporation Finance. By WILLIAM H. HUSBAND and JAMES C. DOCKERAY. (Chicago: Richard D. Irwin. 1942. Pp. viii, 853. $4.25.)

This study, the authors declare, ". . . is intended to review financial principles and practices in the light of the pronounced changes which have occurred in recent years" (p. v). Active public regulation has exercised a profound influence on the activities of corporation finance. Numerous laws and regulations, molded by a sharpened public interest, have tempered the spirit of motivation and direction. There have been many changes in recent years. Modern developments, especially those pertaining to the social responsibility of management, have given corporation finance a new hue.

Despite the many changes, functions have endured. There is a structural background to corporation finance. This study emphasizes change in the light of a cumulative and inherited past. Little attention is given to the merits or demerits of any particular order. The authors intend merely to recognize change as an objective fact.

The book is divided into eight sections entitled: Economic Setting, Instruments of Corporation Finance, Organization and Structure of the Corporation, Security Distribution, Income and Current Operations, Corporate Expansion, Failure and Reorganization, and Public Policy. Each section contains from two to eight pertinent chapters. Each chapter is filled with current information and an excellent analysis of current topics. The financial journals and reports have been combed for examples to illustrate each particular subject. The book is thoroughly documented.

While this writer is impressed with the fund of information and new material reported, nevertheless the assembly raises an important question.

Corporation finance is concerned with only a fragment of the economic scene. Basically, the authors declare (p. 6), it serves two important functions: It provides a means of assembling funds for business; and it involves the financing and policy formulations necessary properly to coördinate the productive elements of a going concern. These functions are important and yet they are not independent variables. Many factors involved in the collection and distribution of funds and in the formulation of policy depend upon elements which are external to the corporation. The decisions of management and the investing public cannot be comprehensive if the corporation is considered as an independent economic unit.

The authors have done much to impress this point of view on the reader. For example, there is an excellent chapter on the sources of long-term capital, and the chapter on working capital is well documented. The fact that the reader is instructed in sources is not, however, enough. The student should be familiar with the problems involved in making a decision whether or not to invest. He should see the plan for the particular corporation in the light of alternative investment opportunities.

Writers frequently disagree about the contents that should be incorporated in an elementary textbook. Many limit themselves to descriptive material. They describe the methods by which corporations are organized and they discuss the contents of innumerable security contracts. Attention is given to corporate financial statements and to problems of consolidation and reorganization. There is without doubt a definite need for such material, since most students are totally unfamiliar with techniques and instruments and the university provides an introduction. Nevertheless, this writer agrees with N. S. Buchanan that it is all very well to include descriptive material within the text, but corporation finance is ". . . likely to remain unassorted and unrelated piles of gaudy and drab materials"[1] unless there is a firm theoretical skeleton. The future of analytical corporation finance is inescapably bound to the future of theoretical economics. There is some doubt that the authors would subscribe to such a statement.

Despite the wealth of material on financial practices and principles, there is one subject which, with some exceptions, was overlooked. Much of modern business is government business. The government corporation has undertaken to perform many functions, some of which were formerly within the realm of private business. In fact, private and government corporations are, in some fields, competitors. Under the circumstances, a text on modern corporation finance should include some description and some analysis to reveal the function of the government business corporation.

In fact, this writer believes that too little attention is given to the nature of the corporation. It is true that much valuable time may be wasted by tracing the history of corporateness. Ancient corporations were not the counterpart of the modern business corporation. On the other hand, the student may acquire a more thorough understanding of such subjects as stock and par value, for example, if special emphasis is placed upon the corporate person-

[1] N. S. Buchanan, *The Economics of Corporate Enterprise* (New York, Holt, 1940), p. v.

ality. This need not be done in a manner that leaves the impression that the corporation is concrete and constant.

The corporation is an institution which was developed to facilitate modern business. For convenience, it is called a person. The corporation and the stockholder are, of course, two different persons. The form and limits of their business relations are expressed and implied in a peculiar kind of contract called stock. Since persons may have many different business relations there may be many different kinds of stock.

The corporation contracts with persons to carry on the business for which it was formed. Since the corporation and the stockholders are not the same person, the latter cannot be held responsible for the corporation's obligations. The stockholder's liability for the corporation's debts should be limited. Par value is the amount of the stockholder's liability or a base to be used in its determination.

The fact that the authors do not have a skeleton on which to hang their material does not distract from the book's usefulness. They have accomplished their purpose admirably. Many financial principles and practices are reviewed in the light of the pronounced changes of recent years. The material on regulations and on Sections 77 and 77B is excellent. This writer is in thorough agreement with all that is said. He is merely disappointed in the fact that a book with the word "modern" in the title does not make more use of the unhappy discovery that our world does not consist of a very large number of independent cells.

EDWARD G. NELSON

Stanford University

Utilization of Corporate Profits in Prosperity and Depression. By O. J. Curry. (Ann Arbor: Univ. of Michigan Press. 1941. Pp. 131. $1.00.)

Students of corporate affairs will welcome the monograph on the *Utilization of Corporate Profits in Prosperity and Depression* by Professor O. J. Curry. It is a good statistical study of the financial record of corporations bearing upon the subject of income administration.

There has long been a need for a careful factual study of the problem of corporations retaining earnings in lieu of paying cash dividends. There are many advocates of the policy of building up surplus during prosperous years to provide a fund that will be available in poor years. On the other hand, a large group do not believe that surplus accumulations are a cure-all for corporations during depressions or that such accumulations will maintain dividends in poor years. This study will give us a much better basis for our opinions than we have had heretofore.

The author of this investigation has made an important contribution to the field of corporate studies by giving us a careful statistical analysis of a significant segment of the corporate system. Professor Curry probes intensely the subject of corporate income administration and contributes a scientific

study in contrast to much material on the question which merely assumes the right answer or is definitely fallacious. The author has organized the study well and the presentation of the data is clear, but tedious in some parts.

The financial records of 72 well-known corporations in 12 distinct lines of industrial activity comprise the raw material for the study. The analysis of these companies covers a period of 15 years, 1922-36. The sources of information for the investigation are the reports of the corporations to stockholders. While the 72 companies are not a perfect statistical sample of all corporations, they would appear to be a satisfactory one for the purpose of showing a phase of the financial policy of an important segment of industrial enterprises. The companies analyzed are held to be quite representative of each of the 12 industries. Assets of the 72 corporations aggregate nearly 10 billion dollars.

The stated goal of the author is to show "how much of the profitable period earnings were reinvested as compared with the amounts paid in cash dividends, how the withheld earnings were invested, and what eventually happened to the investment" (Preface). The author's chief objective "is to show by specific companies the earning and dividend records during the prosperous twenties and to demonstrate that a very small proportion of dividends withheld during the good years reached the stockholder during poor years" (p. 26). It is not the intention of the study to pass upon the merits of reinvesting earnings or to decide whether or not it is good or bad for stockholders.

Chapter 2 gives an analysis of reinvested earnings and corporate expansion of the 72 companies for the period 1922-30. About 40 per cent of the total net income for the decade was retained. There is no pattern indicated among individual concerns. Only 17 companies retained 50 per cent or more of their income while 14 companies retained less than 25 per cent.

Retaining earnings is a very important method of financing corporate expansion. Almost three-fourths of the companies studied financed at least 50 per cent of their growth by this method. Nearly one-half of the corporations expanded their assets from retained earnings by more than 50 per cent of the total assets at the beginning of the study.

Chapter 3 shows the relationship between reinvested prosperity earnings and depression dividends. The conclusion is that "there is no apparent relation between earnings reinvested during the twenties and dividends paid during the early thirties" (p. 93). Two-thirds of the dividends paid by the 72 companies in 1931-33 were from current earnings. The other third came from surplus and was about 20 per cent of the earnings retained in the period 1922-30. Dividend policies in the depression seemed to be largely predicated upon current earnings. Most of the companies having substantial earnings in 1931-33 increased common dividend payments. Those companies with little or no earnings in the depression made drastic reductions in dividend payments.

What disposition did the 72 corporations make of the retained earnings? In general, the reinvested earnings for the period 1922-30 plus new capital from securities were invested in plant facilities, retirement of senior securities, cash and liquid securities, inventories and receivables. The investment in any single item was not large relatively. There was no particular pattern discernible

among individual companies. This is true of companies in the same industries. It is clear that reinvested earnings were primarily used to increase productive facilities, that no fund was set up to draw on when revenues declined.

Chapter 5 is devoted to asset liquidation and earning deficiencies. It shows how specific corporations met their depression losses. Taking the 72 companies as an aggregate, the assets liquidated to the greatest extent in the period 1931-33 were receivables, inventories, cash and plant assets. Current assets were liquidated more than plant facilities. Asset liquidation policies varied widely among individual concerns. In summary, we may say that net income retained in the prosperous period is invested in various assets and that the same classes of assets are liquidated in the poor years to provide funds to meet the deficiencies.

While the monograph is to be commended as a piece of research, the exposition is only fair. The purpose of the study is stated so often throughout the manuscript that it becomes monotonous. A few sentences have words disarranged, such as "the companies invested the funds 25 per cent or more . . ." (p. 72). On page 6, footnote 14, H. M. Keynes should be J. M. Keynes. In Table 5 "thirty-one companies" are mentioned but only 30 are listed. There seems to be a discrepancy in the written material on page 37 and the data in Table 6. These are minor flaws and do not seriously impair a valuable study.

N. Gilbert Riddle

Ohio State University

Public Control of Business; Public Administration; National Defense and War

The Supreme Court and Judicial Review. By Robert K. Carr. (New York: Farrar and Rinehart. 1942. Pp. xiv, 305. $2.00.)

The series, Government in Action, to which this volume belongs is an attempt to revive a great tradition. It aims to present the American commonwealth with sweep and intimacy and to do for our age what de Tocqueville and Bryce did for theirs. The grand manner, however, is no longer within the reach of the solitary scholar, for vastness of subject and precision of craft forbid. The stuff of life can be discovered only by the person who limits his parish. The over-all has to be acquired through the hearsay of secondary sources. A general treatise is almost certain to be cold and solemn and dully remote. A cocksure attitude almost inevitably betrays a lack of mastery over material. The editor's way of escape is to break down "the art of government" into "its institutional forms," to rely upon "special competence" for fact and drama, and to secure perspective through "varied outlooks." A group of observers is to replace the great commentator; the entity is to emerge, not as an articulated treatise, but from a constant shift in topic and viewpoint.

By the editor's norms, Robert Carr has done well his task. His book is addressed to the college student, whom the author takes to be a novice in the

subject, an intelligent human being, a person curious to know why. Its spirit is of inquiry, not the parade of a system or the expounding of a gospel. Although Carr's articles of faith stand out clearly, he is careful to recite the arguments which tell against his positions. There is no telling it to the boys, no display of an erudite vocabulary. Although the most perplexing issues are not avoided, there is no writing down. Even in the discussion of such confusing mysteries as due process, the circle of commerce, a political question, the style remains simple and clear. The author presents an institution beaten upon by the course of events and far from its final form. He keeps to the front the volatile element in his material. The reader, even though an undergraduate, must make up his own mind.

The quality of tolerance is the more remarkable in view of the author's intent. He postulates his undergraduate and the home from which he comes. His "essay"—the word is his—attempts to establish an enlightened attitude toward the work of the Supreme Court and its controls within the national economy. It is no easy task, for minds young or old, to take a Constitution which is a source of authority and transmute it into a Constitution quite useful in providing sanctions for judicial decisions. Or to make clear how a doctrine, such as judicial review, freedom of speech, or commerce among the several states, responds in its development to changes in economic belief. The author insists that his book is not upon the law of the Constitution. Yet his topics are the storm centers of judicial attention; and the great battles, in which he pits social legislation against *laissez-faire,* are of a kind with conflicts over even minor doctrines. In his account the accent falls as it should upon the actor, the Supreme Court; and constitutional law emerges as a secondary phenomenon, the utterance of a group of men working within an established institution. The ardent, almost crusading, intent is to blast at a rock of ages —and the wonder is that it is done with so much poise and tolerance and sweet reasonableness.

Thus stands the book when measured by the editor's standards. But the reviewer has a right to the it-seems-to-me of his own norms. The story of due process, as set down in the law journals, is far more dramatic, and its mutations far more sharply defined, than would appear from these pages. Carr praises Mr. Justice Holmes for his argument in the Lochner case that the regulation of hours of labor is constitutional. The more modern view is that Holmes passed up a glorious opportunity to insist that the challenge to the statute should be dismissed for want of jurisdiction. Nor does the author adequately expose the sheer fictions by which the Court has attempted to draw the line between national and state control. To qualify commerce by such terms as "stream of," "burden upon," "come to rest," "direct and indirect effect upon," is at best to confuse the physical movement of goods with the operation of an industry, and at worst to make figures of speech do dialectical duty for realities. A criterion which goes back through Marshall to the Randolph Resolution is more in point. It holds that the Congress has power over those matters which lie "beyond the competence of the several states" and thus invites the justices formally to recognize what as men they already

know—that there is such a thing as "the national economy." He fails to reveal how procedural devices are used as ways into court—or to keep substantive questions from ever being raised. And to his detail here and there one notes an exception. In respect to Dr. Bonham's case, he overlooks Samuel Thorne's penetrating study; he refers to the *Encyclopedia of Social Sciences*, not by title of article, but by volume and page; he calls Mr. Chief Justice Fuller "a brilliant practicing lawyer"—a fact concealed from public and students all these years.

But my most serious quarrel is with the conception of the college student toward whose enlightment the book is fashioned. Carr seems to regard him as interested in an old battle, not in a current trend. A little while ago the author would have been regarded as radical; today I know no Wall Street lawyer under forty-five who would take serious issue with any of his theses. A decade ago, the denial that judicial review was a reference to the higher law was a fighting faith. And an insistence, with a trio of opinions as evidence, that judgments were human and finite and fallible—oh, so fallible!—was at any time good for an uproarious class-hour. But in due time the iconoclasm of the law school ripened into a demand for court reform. Although the battle was lost, the bench hastened to amend its ways. Now a return to the old attack calls from law students only a "So what?"—and the institution called judicial review takes on a new identity. As long as there is a high bench whose task is error and appeal, it will contrive techniques for asserting its authority. No change in personnel, no self-denying ordinance, is proof against the urge of those in command of an establishment to enlarge their dominion. The new court, like the old, is busily aware of its office in the national economy. As old issues are forgotten new ones intrude and dialectic, like clothes, responds to changes in fashion. For divisions did not cease when the Four Horsemen—technically Van Devanter, McReynolds, Sutherland, and Butler, JJ.—left the bench. Nor did foxiness depart with the passing of "the Old Fox"—known to the Reports as Hughes, C. J. The tricks of the trade, recently displayed in the opinions, mark the current bench as worthy successors to adroit craftsmen. And I wonder if even college students do not deserve to know something of what the most powerful of lawmaking bodies is now up to.

WALTON HAMILTON

The Yale Law School

Patents and Antitrust Law. By LAWRENCE I. WOOD. (Chicago: Commerce Clearing House. 1942. Pp. xiv, 218. $3.50.)

The relationships of the patent system to the operation of our industrial machine and to our basic national economic policies have been sharply limned by events of recent years, beginning with the hearings before the Temporary National Economic Committee, the many indictments brought by the Department of Justice against patent-holders under the antitrust laws, and culminating in the recent hearings before the Senate Patents Committee. While

the "patent problem" is not a by-product of the current crisis, the impact of war and the economic pressures generated by sudden mobilization of our full productive potential have served to crystallize many of the moot issues centering on the scope of the privileges (not rights) conferred by the issuance of a patent.

It is as a frame of reference for present and future discussion that *Patents and Antitrust Law* has outstanding value. The worth of this serious and scholarly effort to introduce better order to the confusion and ambiguity surrounding "the patent question" has been recognized by its receipt of the First Award of the Linthicum Foundation Competition for 1941.

Before taking up the specific contentions which follow from the thesis of the work, certain impressive features of Mr. Wood's study should be recorded. First, the patient probing and dispassionate objectivity which are manifest throughout the book are unusual qualities in dissertations dealing with patents. Secondly, the sumptuous documentation, the range of the author's perspective, and his high regard for accuracy give the construction of the analysis a mathematical nicety and precision. Finally, while the style is necessarily exact and legalistic, it retains a terse spontaneity contributing much to the general utility of any such study.

In summary form, the author's discussion begins with a résumé of the historical background of the patent system, and of the initial incidence of the antitrust laws on patent disputes. The "dilemma" between the purposes and interpretation of antitrust legislation and the "rights," which a patentee acquires with the patent, to "monopolize" is stated and dissected with skill, and a distinction is made between those problems "revolving about restrictions imposed by the individual patentee, and those which arise from the use of patents by corporate combines" (p. 35). The ruling and at least the principal cases which have occurred in each sector of conflict in the area of doubt are briefed succinctly, together with extensive supporting or relevant citations. Restrictions on prices of patented products and on the user of patented processes or devices are treated at length, and the various practices which have in one way or another collided with the antitrust laws are comprehensively catalogued.

The fundamental and truly gigantic problems created by patent pooling are charted *seriatim*. The convergence and intersection between patent consolidations and antitrust policy are examined in detail, and we are provided with a coherent digest of all major cases of this category which have come before the courts or legislative committees of inquiry in recent years. In itself, this summation of the many notable instances of patent pools which have been considered by the T.N.E.C., or which have come within the ambit of a rejuvenated policy of enforcement of the antitrust laws performs a real service. The author's execution of this task renders his book a "must" addition to the reference library of economists and attorneys working in this field.

With so much of good that can be said about his work, it is surprising and regrettable that, in the reviewer's opinion, the author fails in what must be regarded as the real test of a significant contribution to the development of

public policy, namely, a forthright effort to resolve, or at least outline the acceptable solutions to the riddle he has propounded. Having obtained what might be termed an "elegant" equation among the variables of theory and fact, little effort is made to go forward boldly to the results logically impelled by the author's own calculus. If the analogy may be extended, the problem is differentiated, but not integrated, and the halting, rather diffident suggestion that "the resolution [of the dilemma] must remain a function of the judicial process" is hardly acceptable after such mordant exposition of the abuses to which the patent franchise is subject at the present time. The judicial process, *per se*, cannot and should not be called upon to enunciate principles of basic economic importance, and certainly the courts cannot be expected to provide either the impetus toward or the broad expression of the "transvaluation" of patents necessary to the elimination of the malpractices flourishing so profusely in our industrial system.

A statement made recently to the effect that "Production is the key to victory, and patents are the key to production" emphasizes the critical aspects of the patent question. Because of the concentrated controls which inhere in patents over industries having vital strategic value in war, and hardly less moment in peace, and our loss of the industrial initiative, resulting directly from patent restrictions, the use of patents to divide markets geographically, to divide the universe of technology functionally, and artificially to create scarcity by inhibiting expansion of capacity is stripped of all claim to protection. Moreover, it is clear that the remedy lies in the realm and in the power of legislation. In so far as the antitrust laws are concerned, they require explicit, formal extension, so as to prohibit in a positive manner the types and degrees of misuse revealed, for example, in the hearings before the Senate Patents Committee. As for the patents themselves, it must be made entirely clear that they impose on the patentee the same responsibilities of public trust, as well as the immunities, implicit in any form of "property," or, rather, public franchise.

In fairness to Mr. Wood, it should be stated that some of the cases, such as the Hartford Empire (glass container) case had not progressed to the point of decision at the time his book was published so that he could not benefit from the sweeping opinion handed down by the District Court. Had he been in a position to do so, it is conceivable that his treatment of several of the other similar instances would have been different.

The points of difference raised do not impair the stature of this study. It is not too much to say that, as our knowledge of the factors, forces, and issues involved in the patent problem increases, it becomes correspondingly more evident that, both nationally and internationally, the economic character of a post-war world will be markedly affected by the rationale of our patent policy. To the requisite understanding of the complexities and difficulties which will be encountered, *Patents and Antitrust Law* furnishes an exceptionally useful introduction, but in no sense the definitive term.

CHARLES A. WELSH

Washington, D.C.

Patents and Industrial Progress. By George E. Folk. (New York: Harper. 1942. Pp. xiii, 393. $3.00.)

This is a piece of propaganda literature for the maintenance of the present patent system and against the "revolutionary recommendations" (p. 59) adopted by the Temporary National Economic Committee. The title had led me to expect a much-needed study of the economic significance of the patent system. What I found instead was nothing but an attempt to refute or disparage every anti-patent enunciation that is contained in the record of the T.N.E.C., and to reproduce, almost in full, all pro-patent testimony given in the committee's hearings. About two-thirds of the book consists of quotations.

The allocation of space to topics is the following: 56 pages on "The Case Presented by the Department of Justice" (automobiles, glass containers, fiber-glass, and beryllium); 30 pages against Professor Walton Hamilton and his *Patents and Free Enterprise* (T.N.E.C. monog. no. 31); 146 pages on (and, especially, from) "The Case Presented by the Department of Commerce" (Commissioner of Patents and many witnesses eulogizing the grand things patents have done for mankind); 22 pages against "Compulsory Licensing"; 48 pages on other "T.N.E.C. Recommendations"; 31 pages, as an appendix, on "Patents and the Antitrust Laws." This Appendix, containing excerpts from Supreme Court decisions, may constitute to some readers a useful job of compilation.

But what value, other than propaganda, can there be in the reproduction of testimony of well-meaning engineers, interested business men, and seasoned patent lawyers expounding their naïve economic theories about the social benefits of the patent system? Does the author really believe that it proves anything about the problem of patents and unemployment, or patents and the standard of living, if he reprints what others think about it? even if the cited expounders of economic theory are great experts in their fields, such as radio engineering, carburetor production, chemical research, patent law administration, etc.?

I do not criticize the book and its methods of "analysis" because it defends the patent system. In this attitude the author may or may not be right. I have the same respect for an advocate or an opponent of a policy if only the analysis which he presents is well-reasoned, keen, scholarly. What I am opposed to is propaganda in the disguise of analysis. The book perhaps contains legal arguments, but it contains no economic analysis. And I am nauseated by the pitched tone of conviction in a lawyer's plea in the face of awkward evidence; such as the plea for the glass-container industry, of which the author says that "other machines and processes are open to those having sufficient capital and the 'know-how' to enter this *highly competitive business*" (p. 60; italics are mine).

The polite words on page 77 which the author directs to Professor Walton Hamilton might much better be applied to himself: "His effort to prove a preconceived view has so warped his presentation as to make it of little, if any, help in a study of the patent system."

Fritz Machlup

University of Buffalo

Industrial Organization; Price and Production Policies; Business Methods

Commodore Vanderbilt: An Epic of the Steam Age. By WHEATON J. LANE. (New York: Knopf. 1942. Pp. xiv, 357. $3.75.)

The well-known principles of free private enterprise under which our economic system presumably operates accord a key position to the entrepreneur or business man. As the organizer and supervisor of factors of production he presumably satisfies the consumers' wants in the most efficient way and at the same time rewards himself with a moderate amount of profits. Accordingly, one should expect to find business men of the past and present popular objects of study from this point of view. Such studies supposedly should be seeking answers to the question whether the quest of specific business men for profits has resulted in benefit or harm to the community. Particular attention might be paid to the extent to which the profits, if any, were due to the abilities of the entrepreneur and to what extent they were a result of the institutional structure of the community.

Needless to say, very few biographical studies of business men have given us answers to these questions. Perhaps this is because many biographers are not well trained for such a job or because they feel that there is insufficient public interest in such prosaic matters. Perhaps a more important reason is the fact that the study and measurement of causal factors is a very difficult task for the social sciences. In my opinion, this study of Dr. Lane's is a long step in the direction suggested above. He has managed with remarkable success to steer a middle path between the uncritical, hero-worship type of biography and the savagely debunking study which has appeared so often in the past. The publishers justly emphasize the chief characteristic of the book, *viz.*, the placing of Vanderbilt's money-making activities against the economic background of his time. We learn of the place Vanderbilt's ferry enterprise at Staten Island had as a part of the New York-Philadelphia-Washington route. His steamboats in New York harbor, on the Sound, and on the Hudson are placed against a setting of economic problems of the area. His interesting Nicaraguan episode becomes a part of the conflict between the United States and Great Britain over the important route to the California gold fields. Vanderbilt's brief venture into the Atlantic run between Europe and New York is tied to the activities of others and to the much-debated subsidy question.

The book is at its best in the treatment of Vanderbilt's active interest in railroads at a late stage in his life. The author draws skillfully a picture of the position of the Harlem Railroad on the New York-Albany route and how Vanderbilt, apparently this time lacking in farsightedness, was constantly forced to expand his railroad activities because of the competition of other lines. In this way he became interested in the Hudson River Railroad because of its better route to Albany and, as a result of a disagreement over the transfer of passengers and freight, he reached for the Central itself. Later, the Erie claimed his attention as an obstreperous competitor and the oft-told "Battle of Erie" is here related to the financial *mores* of the times. Finally, the midwestern connections of the Vanderbilt lines to Chicago were acquired

as the importance of a transcontinental rail route was realized.

In evaluating Vanderbilt as an entrepreneur, a few interesting sidelights come to light in this study: Vanderbilt's dislike for cutthroat competition and his successful opposition to it seem to have commenced early in his career as a ferry captain, and his original methods were merely transferred to other enterprises. But he opposed monopoly, too—if it was directed against him! Vanderbilt's relations with the stockholders of his corporations are an interesting contrast to certain incidents of the present day. With the exception of his Nicaraguan experience, the stockholders usually gained or lost with their chief because of the fact that the Commodore himself was customarily a large stockholder.

There is little doubt that the Commodore's methods were often socially questionable, particularly when he was tempted to take the law into his own hands to punish those who had hurt him. Lane's background material implies also that much of the Vanderbilt profits was undoubtedly due to the general development of the nation. The rapid growth of New York City, the need for better communication with Philadelphia and Washington to the south and Boston on the north, the settlement of the West and the consequently increasing volume of trade with the Atlantic Coast all made for extraordinary profits. Last, and not least, were the legal and financial institutions (the stock exchange!) which enabled Vanderbilt to make his money almost undisturbed, except by the invasion of men of similar nature. Yet he was undoubtedly a different type of entrepreneur in contrast to such characters as Drew and Fisk who were essentially parasitical manipulators. Vanderbilt at least usually took good care of the geese that laid the golden eggs for him: his ships and railroads were well maintained and the public seems to have been well served. Above all, he possessed the ability to perceive a public need and satisfy it quicker and better than most of his contemporaries. Whether the price exacted by him was an excessive one for the community to pay is a question very difficult to answer, for it would require among other things the reproduction of hypothetical competitive conditions and a comparison of the "cost" under other systems of economic organization. The following quotation from Lane will serve to show how he disposed of a matter that reaches to the very heart of our capitalistic system: "It is no apology for the Commodore to say, however, that his constructive qualities far outweighed the abuses common to his period. Let us repeat, a railroad empire had been created. . . . It is true, of course, that the Commodore was not an 'empire builder' in the sense that such a man as James J. Hill was. . . . Yet the Commodore was a master of transportation, not a genius for that denotes brilliance, but an imperious dictator with energy and hard business sense. The boldness of his financial operations, his coolness in time of crisis, his fabulous stock watering, the grandiose terminal, the breadth of mind which could order a four-track system at a time when practical railroad men scoffed at the scheme as an extravagant luxury, all these bear witness to the dominant traits of his character" (p. 302).

William C. Kessler

Colgate University

Transportation; Communication; Public Utilities

The Economics of Public Utility Regulation. By IRSTON R. BARNES. (New York: Crofts. 1942. Pp. xxiv, 952. $5.00.)

Professor Barnes apparently believes in the strenuous life, both for himself and others, whether they be teachers or students. His *Cases on Public Utility Regulation*, published in 1938, was a work of 984 pages; and his *Economics of Public Utility Regulation* has 952 pages of small print, and would have had many more had not his publishers proved obdurate. The author believes that the economics of public utility regulation can best be taught to college students on the basis of discussions and reports, and that the case method offers the most promise of developing significant class discussions. Doubtless that is why the case book was completed first. In the book now under review the author seeks to meet the needs of those teachers who prefer the conventional methods of instruction.

The conventional approach is extended to the selection of topics. These include the following: the public utility concept; history; economic characteristics; corporate structure; state and federal responsibilities; instruments of regulation; franchises; accounting; rates; valuation; rate of return; expenses; holding companies; securities; service; Federal Power Commission; public relations; and public ownership.

The undertaking is a praiseworthy one. The book is meaty; usually well written, though not always clear, even to a specialist; and well documented. It has a table of cases (twenty-four pages of fine print), and a selected bibliography. The job of proofreading was carefully done; the number of errors is so few that it would be ungracious to list them.

The author's point of view is liberal and his judgment is good. He favors public power projects of the multiple-purpose type; prudent investment as a measure of the rate base; the use of depreciation accounting; the employment of a fair return on the average (during a business cycle) and the use of an earnings-equalization reserve to promote the regularity of dividends; and indeterminate permits. He believes that public utilities should not, as a rule, be allowed to engage in non-utility business; that in the regulation of operating expenses the burden of proof should be on the public utility, and not on the regulatory commission; that upstream loans to holding companies should be prohibited; that holding companies should forego the use of bonds; that the preferred and common stock of holding companies and operating companies should possess voting power proportional to their investment; that the fair rate of return should be related to the capital structure of the utility; that regulation should not seek the establishment of those prices that would prevail under competitive conditions; and that in publicly owned plants the taxpayers should not be subsidized by the consumers. He regards the public utility commissions as representatives of the public interest, but of the whole public interest, and not merely that of the consumers. Their function is not to drive prices down for the short-term benefit of consumers, but to permit the utilities to realize earnings that will be sufficient to cover the costs of the service, and

that will at the same time protect the consumers against unreasonable rates. He criticizes the commissions for their tendency to relax into a judicial attitude and for not showing the independence and initiative we have a right to expect from a body of public servants trained by experience in the highly specialized task of regulation.

The book contains a number of good summaries or statements of various matters, including the following: legal and economic theories as to the basis of public interest (p. 13); list (citing cases) of businesses that have been held to be public utilities (p. 20); advantages and disadvantages of holding companies (p. 140); weakness of renewal and retirement methods of accounting for depreciation (p. 272); factors employed as tests of reasonableness (p. 290); temporary rates (p. 299); defects of the peak-responsibility method of allocating demand costs (p. 328); objective rates (p. 351); an equitable rule for accrued depreciation (p. 492); determinants of the appropriate rate of return (p. 525); proper treatment of donations, charitable and political contributions, advertising and promotional expenses in the regulation of operating expenses (p. 623); standards to which all securities of public utilities should conform (p. 694); competitive bidding for securities (p. 733); public relations and propaganda (p. 782). Especially praiseworthy is the very effective indictment of present-fair-value theory and the formulation of a sound prudent-investment program.

The principal fault to be found with the book is its length—952 pages of small print (roughly 435,000 words). The treatment of valuation is out of all proportion to its importance. One-quarter of the chapters and nearly one-quarter of the pages are devoted to this topic. The author has likewise over-extended himself on the subject of holding companies. He devotes two chapters and 142 pages to this subject, and yet almost completely ignores combinations that take the form of a consolidation or merger. The text is not always well organized, probably due to the fact that it had to be greatly reduced in size on the insistence of the publisher; and it is not always within the understanding of undergraduate students.

An author has the right, it would seem, to have his book appraised on the basis of the purpose it was designed to serve. In the present instance, however, this would not be to the author's advantage. The book was designed as a textbook, but it is too long to be altogether satisfactory for this purpose. Appraised, however, from the standpoint of a serious study for those who have ample time for detailed analysis, the work ranks high.

ELIOT JONES

Stanford University

American Highway Policy. By CHARLES L. DEARING. (Washington: Brookings Inst. 1941. Pp. xi, 286. $3.00.)

This study was undertaken as a result of inquiries from the Commissioner of Public Roads of the United States Public Roads Administration. It relates to the highly controversial economic and governmental issues involved in the

annual collection and expenditure of the 2 billion dollars which has been devoted to the improvement and maintenance of our 3 million miles of road plant. The purpose is "to formulate the principles which should govern the location of responsibility, the exercise of authority, and the distribution of the financial burden with respect to public roads."

A wide range of factual and historical material is covered in brief compass. The first chapter is devoted to the evolution of highway policy in England, France and Germany. The author finds that the road function has been regarded traditionally as an essential activity of government and that the failure of the turnpike or toll system of road administration has made direct participation necessary. Roads have been classified according to the prime functions of each type and the responsibility for the three classes (namely, general purpose roads, community service roads, and local or land access facilities) has been assigned to that level of government having the greatest degree of interest in each. Funds for the support of the road system have been raised largely by ordinary taxation, thus distributing the burden not on the basis of direct benefits from road use but according to the collective benefits of society. There is a striking parallel between the policies of these countries and the author's recommendations with respect to the management of American roads.

In setting forth the facts relating to American highway policy, separate chapters are devoted to the evolution of highway policy to 1916, a description of present highway management by state and local governments and the participation of the federal government in road provision, and an analysis of the system of highway revenues. Statistical materials from the highway planning surveys have been used freely. Wide dissimilarities in administration and financing among the states are noted, the most significant fact being that those states which have attained the greatest degree of centralization of authority over roads rely most heavily upon user taxes for their support. Considerable attention is given to the complications in federal road policy arising from the recovery and relief objectives of the last decade.

The analytical sections of the study comprise chapters on the purposes and beneficiaries of modern road facilities, the proper distribution of managerial authority and financial burden, the general transportation problem, and a summary of conclusions and recommendations. The appendixes contain a lengthy historical review of the good roads movement and some more statistical tables.

Two broad generalizations are reached on the basis of the analysis. The first is that the supplying of roads has always been regarded as one of the essential services of government because efficiency of government is dependent upon mobility, and economic and community life require access to land and other property. The second is that the modern road plant is a multi-purpose facility and the services produced by it are distributed unevenly throughout society. Four major purposes of roads are identified: land access, facilitation of community life, intercommunity mobility, and the expedition of such governmental functions as rural mail delivery, national defense, and education.

Sound highway policy is held to depend upon the recognition of these functions and a scientific classification of roads based on predominant purpose. Such a classification would yield three types: a system of highly improved roads whose chief but not exclusive function is to furnish optimum intercommunity mobility; local roads whose prime function is to permit access to main highways and to facilitate purely community travel; and local roads whose predominant purpose is to furnish access to land. Jurisdiction over the main highway system would be lodged exclusively with state agencies and the inclusion of roads and their improvement would be determined solely by criteria relating to intercommunity mobility. Since motor vehicle users are the chief beneficiaries of these main roads, the financial burden would be placed upon them. Local roads, both community service and land access, would be administered by local units of government and supported by general taxation. Standards of maintenance and improvement would be determined by local needs and the availability of funds. The county is regarded as the smallest effective administrative unit for road management since the township is unable to employ competent professional personnel and proper equipment. The author deplores the recent tendency toward centralization of authority through the absorption of local roads by the state systems and their support from revenues derived from motor vehicle owners. He denies that motor vehicle users are the sole beneficiaries of road services and that actual road use measures the benefits fairly well.

Special attention is given to the problem of distributing the financial burden of the general purpose system among beneficiaries. No attempt is made to ascertain the nature or amount of highway costs. The financial burden appears to be identified with annual financial requirements and as such is to be borne largely by motor vehicle users. Three levies are proposed. The conventional gasoline tax is regarded as a satisfactory measure of highway occupancy. A flat license fee, unrelated to actual road use, would be levied to pay for the fixed capital costs of road plant. The third would be a system of graduated levies upon those vehicles which require additions to road facilities or impair standards of road use because of peculiar operating or physical characteristics. Another source of support, presumably a minor one, would be payments by the federal government to the states to encourage the standards of development required for the proper performance of federal functions, including road use for defense purposes. In considering the highly controversial issue of diversion of user revenues to other than highway purposes, the author notes with approval the growing tendency to prohibit the practice by state constitutional amendment.

The proposals of the author have the advantage of administrative simplicity. Each class of roads would be administered by a unit of government qualified to deal with it and the sources of revenue to support each would be segregated. Some financial adjustments would be made between the federal and state governments and also between the state and local governments, the latter to induce communities to maintain adequate standards of road improvement to facilitate such government functions as education. But they would be kept

to a minimum.

There is unlikely to be general acceptance, however, of his thesis that a large share of financial responsibility should rest upon the general taxpayer. The author does not tell us how the financial burden will be divided between users and the general taxpayer and indeed he cannot until the road system has been scientifically classified. But if the classification yields a system of local roads approximating the present legally defined system of about 82 per cent of the total mileage, it is apparent that very substantial contributions will be made by general taxpayers, despite the unimproved character of much of this mileage. Since nearly all of the nonfederal expenditures on primary systems and almost one-half of those on secondary and tertiary roads were derived from state-collected user imposts in 1935-36 (p. 107), a reversal of a trend in local road financing would seem to be involved. It can not be denied that transport facilities, be they railways, waterways, or highways, perform community service, land access, and other socially desirable functions, but it is also significant that these general benefits are realized largely through actual use of the facilities. Taxes upon motor vehicle users have come to be regarded as peculiarly appropriate as means of payment for road services. It is questionable public policy to shift to the already hard-pressed general taxpayer a large share of road expense. And the general property tax is by no means an ideal tax. This is not saying, of course, that the cost of maintaining and improving rural mileage upon which the density of traffic is low and which is used almost entirely by local traffic should not continue to be covered in part by property assessments and general taxation.

The author rejects the commercial or "public utility" theory of highway finance. Some of his criticisms are well taken. It is true, for example, that requiring users to pay the full cost of building highways will not provide an automatic device for the proper allocation of productive power between highway and other uses. But if one discards the commercial concept it is difficult to understand how one can pass judgment on the question of whether or not motor vehicle users are paying their way. To avoid being subsidized the annual revenues from motor vehicle users must cover the annual economic costs. This test would be applicable to the state highway systems which the author proposes to support by user imposts. It would seem proper to include in annual economic costs at least the expenses of operation and maintenance, depreciation of the plant, and interest on the net investment. To use annual expenditures on the highway system, which the author implies in taking the position that economic costs cannot be determined (p. 101), and in his comments on valuation and historical costs (pp. 170-71), is to use a figure which may or may not be equivalent to the true cost. So long as highways are expanding, it is clear that the annual expenditures include large sums invested in additions and betterments. These items are not chargeable as costs in the current period and must be capitalized. Capital costs are the annual depreciation of the plant and interest on the unamortized capital investment. Any calculation which neglects to consider these elements and to estimate their amount can afford no basis for determining the annual revenues properly collectible from highway users.

The author recognizes the importance of the subsidy issue when he devotes a chapter to the consideration of the general transportation problem. On the question of taxes, he finds that the states have not suffered a net loss in taxes on account of the use of land for road purposes because title is retained by the original owners in some cases and the states tax the increased land values occasioned by road improvements. Since property owners pay the taxes, however, he concludes that motor vehicle users escape this burden and do enjoy some competitive advantage. On the issue of capital costs, he takes the view that highway users enjoy an advantage over railways only in so far as the states are able to borrow capital more cheaply than railroad companies. He states (p. 194): "No items or types of capital cost are escaped simply by virtue of the state management of highways. Under any circumstances amortization and interest charges and maintenance and operating costs must be met." If amortization of debt is meant here and maintenance and operating costs include replacements equal to annual depreciation, there is clearly an overcharge. To include explicit interest only is to fail to recognize the opportunity cost of capital which might otherwise be used in alternative employments, all of which suggests the need for defining and ascertaining the cost elements involved in highway provision. Until it is known whether or not user revenues are sufficient to cover legitimate costs, it is fruitless to consider ways of equalizing the competitive opportunities of highways and railways with respect to particular items of cost.

Attention is called to the advantage enjoyed by that part of highway traffic which competes directly with railroads in sharing the burden of highway costs with essentially noncompetitive traffic. This economy of joint use is held to explain in considerable measure the competitive advantage enjoyed by commercial road users. To sacrifice these economies by an equalization of rates or by placing the full cost of highways upon competitive traffic would, as the author points out, be unwise policy. It is enough if the various highway users are allocated their appropriate share of highway costs.

The book is a very scholarly presentation of the general or common benefit theory of road policy. While the proposals made are worthy of serious consideration, the study has not settled the numerous and difficult questions involved. The debate respecting proper highway policy will probably continue for some time to come.

MARTIN L. LINDAHL

Dartmouth College

Commercial Air Transportation. By JOHN H. FREDERICK. (Chicago: Richard D. Irwin. 1942. Pp. xii, 493. $4.00.)

Professor Frederick's book is the fourth to appear in the past two years on the increasingly important subject of air transportation.[1] The purpose of the book, as stated by the author, is to bring together and analyze material

[1] For reviews of the three preceding works, see *Am. Econ. Rev.*, Vol. XXXII (June, 1942), pp. 400-02.

from many scattered sources, to overcome a lack which has been felt both in the industry and in universities.

The scope of the book is wide, covering the historical development of air transportation in the United States, the growth and extent of federal regulation, the problems and services of the airlines, and an evaluation of certain government and airline policies. Because of its scope the book will doubtless find a useful place as a textbook for a first course in commercial aviation in colleges. It should also prove valuable to the layman desiring a general knowledge of air transportation. While Professor Frederick has succeeded in bringing material together from other sources, he has, in this reviewer's opinion, at various points failed to provide a penetrating analysis and evaluation to supplement the factual material.

Persons who are familiar with air transportation and its literature will be inclined to the opinion that the author went pretty far in wholesale adaptation. Cases in point, among others, are chapters III and IV on "Airport Development" and "Airport Adequacy," which are taken from the *Airport Survey* of the Civil Aeronautics Authority; chapters VIII, "Economic Regulation," X, on "Safety Regulation," and XI, on "International Regulation of Air Transportation," which are taken from the *First Annual Report* of the Civil Aeronautics Authority. As a result of drawing rather heavily on various written materials, the book is spotty. At some points there are inconsistencies which should have been ironed out before going to press. In addition, the statistical material is not uniform. The latest figures presented in some cases are a year or two earlier than those presented in works published several months before Professor Frederick's book. Perhaps it is unwise to speculate on the reason for this, but one explanation may be that, since almost all of the charts were reproduced from a booklet by the Air Transport Association, the author did not think it worth the trouble to make new charts to add the most recent figures.

In Part I the historical development of commercial air transportation is reviewed. Apart from one or two minor errors of fact (such as stating that the Air Commerce act of 1926 promised subsidies through air mail pay when the act had nothing to do with air mail pay), the section is a good brief summary. Chapter V, in which the various airlines are discussed, is superficial, reading much as if written by the publicity agents for the individual companies. Chapter VI, dealing with feeder lines, is well done and some real analysis is presented.

Part II deals with federal regulation. The chapter covering the various acts is not adequate. The Air Mail act of 1925 and its amendments, including the very important Watres act, are not even mentioned. Chapter VIII on "Economic Regulation" suffers from too heavy reliance on the *First Annual Report* of the Civil Aeronautics Authority. An analysis of the actual workings of the C.A.A. in its first year would hardly show such definite results as the annual report indicated. In the chapter dealing with the granting of certificates of convenience and necessity, there is a greater attempt at analysis than in most of the chapters. Here again it appears, however, that the author has relied too heavily on the surface of the printed pages of decisions and has not read

between the lines or tried to analyze the behind-the-scenes reasoning of the C.A.A. and Civil Aeronautics Board.

Part III, constituting about one-half of the book, is entitled "Problems and Services of Commercial Air Transportation." After leading off with a chapter on the economics of the industry, the author has descriptive chapters on airline equipment, operation, and financing, and an exceedingly interesting chapter on selling air travel. Unfortunately, the chapter on economics is very spotty. Several statements are easily subject to misinterpretation. For example, a breakdown of airline expenses is given showing a cost of 47 cents a mile, and the statement is made that this is indicative of the prevailing situation. It would have been much better to have given the range of costs; for 47 cents a mile is at the low end of the scale with several carriers running 60, 70, or 75 cents a mile. Likewise, with reference to joint costs, it is stated that a considerable portion of costs can be separated between mail and passenger and that "About a third of the direct aircraft operating expenses is incurred by planes assigned to exclusive mail or exclusive passenger service." This statement, taken from another source, is made in the present tense although the source of the statement indicated that such a figure applied to an earlier period and that, for a number of years, there have been no planes assigned to exclusive passenger service.

The present air transport system is largely the development of the system set up under the Air Mail act of 1934. For four years thereafter the Interstate Commerce Commission was the rate-making body. It set up several scales of rates and issued thirty-five decisions. For some years after the Civil Aeronautics act was passed, the Civil Aeronautics Authority (later Board) hewed close to the methods and procedures of the I.C.C. The reviewer is unable to explain why this important period is treated so sketchily in Professor Frederick's book. Only two pages are given to the I.C.C. period and the impression is left that only one decision was handed down.

It is a pleasure to find the final two chapters on "Air Express" and "Air Cargo" entirely original and containing keen analysis. Professor Frederick finds that the contract of the Railway Express Co. with the airlines for the carriage of air express is restrictive to air transportation. In the final chapter it is concluded that the present airlines are the logical carriers of air cargo in preference to separate companies. In both chapters the conclusions are supported by clear-cut reasoning.

While this book should prove helpful to those desiring a treatment of almost every phase of commercial air transportation within the covers of a single book, it is unfortunate that it is not more uniform in its degree of originality and economic analysis.

F. A. Spencer

Washington, D.C.

Bonanza Railroads. By Gilbert H. Kneiss. (Stanford University, Calif.: Stanford Univ. Press. 1941. Pp. xvi, 148. $3.00.)

Few of the western mining camps grew up along traveled ways; most of the great strikes were made in areas previously uninhabited and remote from

established transportation lines. In the early years of the camps the ore and concentrates were hauled slowly and expensively down steep mountainsides and across virtually waterless deserts. A cheaper form of transportation was essential for the bulky ore, and mining men soon turned to the use of railroads. By 1855, when the railroad network of the Middle West was hardly begun, the Sacramento Valley Railroad was operating eastward out of Sacramento into the mining country. The first transcontinental line had just been completed when the San Francisco bankers Sharon and Mills built the Virginia and Truckee from Carson City up the steep slopes of Sun Mountain into Virginia City, and northward from Carson to a connection with the Central Pacific at Reno. By 1875 the Eureka and Palisade (later the Eureka Nevada) had been built across the desert to Eureka, center of a rich new silver and lead district. In 1880 the Nevada Central was completed ninety miles down the Reese River valley to Austin. During the early eighties, almost before San Francisco and Los Angeles were connected by rail, the Carson and Colorado, a subsidiary of the Virginia and Truckee, had been built three hundred miles across the uninhabited deserts of western Nevada and over the White Mountains to reach the Cerro Gordo mines near Owens Lake in southern California.

In early years the lines were extremely profitable; for example, the Eureka and Palisade recovered its investment out of profits within a year of operation. But the mines soon began to decline, as the better grade ore was exhausted. Not only did the roads lose most of their ore traffic, but much of the other traffic also as the towns declined in population. Eventually came motor transportation to take much of the little traffic that remained. But the roads carried on. The Sacramento Valley, developing new traffic in lumber and fruit to replace the old, remains as a relatively important Southern Pacific branch. The Eureka and Palisade and the Nevada Central, unable to keep their worn old locomotives on the battered, rickety tracks, were forced to abandon their lines in 1938. The Virginia and Truckee still operates between Minden, Carson City, and Reno, but its schedule of a mixed train each way three times a week is far different from that of fifty-two trains daily of bonanza days. The line of the Carson and Colorado, sold long ago to the Southern Pacific, is also still in operation, except for the section over Montgomery Pass.

The history of these railroads, plus that of the San Francisco and San Jose, a line whose development bears little similarity to that of the other roads, is portrayed in detail by Mr. Kneiss. The book is an interesting contribution to the economic history of the Far West. None of the roads were of national concern, but they were of primary importance to the communities which they served, and their history is typical of many other roads of the West. The great difficulties of getting capital, the high rate of profit in early years, the charges of monopoly, the difficulties of readjustment to declining traffic are well portrayed.

Furthermore, the history of these roads illustrates well the thesis of Healy and others that the traditional concepts of fixed costs in the railroad field must be revised. Despite tremendous losses in business, these roads managed to continue operations for long periods by very great reductions in costs. It is

clear, however, that there are limits to cost reduction. A certain minimum annual expenditure on maintenance is necessary regardless of how light traffic density is; when the railroads reached the point that they could no longer cover this, their doom was inevitable. Both the Nevada Central and the Eureka and Palisade stopped operating because they could no longer keep their trains running with any degree of safety and no money could be obtained to make necessary repairs. The Virginia and Truckee abandoned its long unprofitable Virginia City line only when the tunnels closed so far that trains could no longer pass through.

JOHN F. DUE

Washington, D.C.

Labor and Industrial Relations

The Women's Trade Union Leagues in Great Britain and the United States of America. By GLADYS BOONE. (New York: Columbia Univ. Press. 1942. Pp. 283. $3.50.)

In 1903, just three decades after the establishment of what was later known as the Women's Trade Union League in Great Britain, the Women's Trade Union League of America was organized in Faneuil Hall in Boston. It is significant that the American League was organized in the shadow of an annual convention of the American Federation of Labor, then in session in Boston. It is also significant that Samuel Gompers greeted the new venture, as the author says, "kindly if somewhat condescendingly." Never really generous or whole-hearted in his support of the League, there were later moments when Gompers perhaps felt even less amiably disposed toward it than at its inception in 1903, as for instance in 1915 when the League's Committee on Judicial Decisions called attention to a possible "joker" in the language of Section VI of the Clayton act at the same convention at which Gompers less discerningly eulogized the act as "labor's Magna Carta."

This incident is cited not only to show the attitude of leaders in the trade union movement toward the League, but also as evidence of the author's skill in weaving the history of the League into the broader fabric of the labor movement itself. She describes the Women's Trade Union League as "the woman's movement within the labor movement," performing the dual task of organizing working women into trade unions, and interpreting to women's organizations everywhere the problems of women who work. It is a chronicle of a struggling organization within a struggling movement. For if as Perlman asserts, "the foremost problem of American labor has forever been that of organizing and staying organized against the disruptive influences of a predominant individualism," how much more has this been true of women workers in America! Hampered alike by lack of funds and apathy on the part of women workers whose economic status it sought to improve, whether through trade unions or legislation, the League has been "persistent, strenuous, militant," and its achievements should be evaluated in the light of the obstacles which have

confronted it. This the author has done with reassuring objectivity, especially for one who has herself been closely associated with the League.

A history of the British and American women's trade union leagues might easily have been little more than a detailed record of organizing activities, finances, committee work, and personnel, thus limiting its appeal to those actively associated with the work of the leagues. Instead, Miss Boone has drawn upon a thorough knowledge of the British and American labor movements to place the story of the organization and development of the two leagues in proper perspective within the labor movements of which they are an integral part. In doing so she has widened the appeal of her study to include all who are concerned with the development of the labor movement here and in Great Britain.

Miss Boone apparently disagrees with those critics of the League who believe that the weakness of working women's organizations in this country and elsewhere has been in part attributable to the paternalistic attitude of philanthropic women who through their own organizations have sought to secure benefits for working women instead of training them to be articulate in their own behalf. She believes that all the work of the League in this country has been broadly educational, and that the development of leadership within the group of working women has been one of its most important services. In her opinion, Mrs. Raymond Robins and the "founding philanthropists" have definitely helped to develop such women leaders within the labor movement.

If in the final chapter one feels some reluctance on the part of the author to evaluate the accomplishments of the Women's Trade Union League in this country, it may perhaps be attributed in part to her complete awareness of the obstacles which have confronted it in the past, and of the dimensions of the task that still remains to be done. She refuses to turn prophet. Of the future, she says only this: "Whatever may be the League's rôle in the future, its history shows that it may be credited with laying the essential foundations for the spread of organization among women."

MARGARET ELLIOTT

University of Michigan

Social Insurance; Relief; Pensions; Public Welfare

From Relief to Social Security: The Development of the New Public Welfare Services and Their Administration. By GRACE ABBOTT. (Chicago: Univ. of Chicago Press. 1941. Pp. viii, 388. $2.50.)

We have here an invaluable source book on the history of our public welfare policies and politics during the depression decade of the 1930's. And we have besides a most interesting and vivid commentary on these policies by the only social worker at the head of an important federal bureau when the financial collapse of 1929 came. Grace Abbott was head of the United States Children's Bureau from 1921 to 1934, and thereafter, until her death, she served

as professor of public welfare administration at the University of Chicago. The volume is edited by her sister, Edith Abbott, director of the School of Social Service Administration at Chicago. It consists of papers and addresses covering a multitude of subjects connected with our treatment of the unemployed and their families, as well as with mothers' aid, health security, and various features of the present Social Security act. Only those dealing with relief itself will be touched upon here.

Many passages bear quoting. Perhaps the most striking occur in the opening paper written in 1939, reviewing the decade as a whole in historical perspective. Characteristically it is called, "The Social Services, a Public Responsibility," for a favorite theme of both the Abbott sisters has been the need for government financing of all the major social services.

The opposition to public responsibility is sketched strongly, from the experiences of Dorothea Dix a century ago to the apple-selling attempts of the late Hoover period and the sudden killing-off of the Federal Emergency Relief Administration under the New Deal in 1935. "We were not prepared to feed the hungry in 1930," recalls Miss Abbott. "Relief was still entirely local—for the most part on a township or county basis. This meant that in some of our states there were a thousand or more independent poor-relief authorities. There were private relief societies only in the larger cities and towns. . . . Selling apples was to save the unemployed in our large eastern cities. . . . The 'block system' was next suggested. Under this plan each block was to care for its own poor. . . . Some blocks had no one in need, and in others practically everyone was unemployed and destitute. . . . President Hoover's method was the organization of employment committees on a national, state, and local basis. They were not to give relief—that was a mere palliative and reminiscent of the 'dole'—the new committees were to get jobs for the unemployed. The Hoover committees sat with folded hands, dedicated to the idea of prevention but with no program; while about them a vast epidemic of unemployment claimed an ever increasing number of victims. Expansion of private relief . . . was attempted. . . . But . . . emergency relief funds . . . were raised only in the large industrial centers. In mining villages, in single-industry towns, in rural communities, children were hungry and cold during these first years of the depression. Public assistance by the states or national government was called a 'dole,' and the word 'dole' was intended to carry with it the idea that the plan proposed was altogether repugnant to our social and political philosophy. Local charity, we were told, was adequate for the treatment of the effects of a disaster, the causes of which the same men said were international. . . . President Hoover, therefore, sent army officers, who, according to the press, were to be assisted by the local militia in a survey of relief needs. They telegraphed back that the local agencies and the Red Cross were adequately meeting the existing need. Their test was doubtless whether the victims were accepting the situation quietly or whether there was danger of riot and bloodshed. The surveys made during the winter by the United States Children's Bureau . . . showed that there was appalling suffering among children, that local relief was entirely inadequate, and that the states seemed reluctant to accept re-

sponsibility for the relief of what was clearly a national catastrophe. . . ." (pp. 19-22).

Finally, with the advent of the Roosevelt administration in 1933, the F.E.R.A. was set up. However, "although the F.E.R.A. was well administered and the needs of the unemployed were more adequately met during the period from 1933 to 1935 than ever before in our history, the federal government encountered great difficulty in many sections, particularly in the South, in persuading local communities to give adequate relief to the unemployed even when the federal government paid almost all the costs" (p. 28). Moreover, the F.E.R.A. had to exist on a hand-to-mouth basis. "Under the F.E.R.A. the state directors never knew in advance what amounts they would receive from the federal government or the conditions on which grants would be made. In other words, they did not know from month to month how much in federal funds would be available for direct relief, for the costs of administration, for C.W.A., for work relief in general, or for special groups of the unemployed (teachers, nurses, etc.), or for W.P.A." (pp. 46-47).

In 1935 the F.E.R.A. was abandoned altogether and the so-called "unemployables" were returned to the states and the local communities again. A period of great suffering ensued. "The return of those who are in need and not included in the benefits of the Social Security Act to the locally administered poor-relief system was as wasteful and inefficient as it had been cruelly unfair . . ." (p. 32). Miss Abbott calls it ". . . the chaotic and callous policy of no relief or inadequate relief which has been followed since the F.E.R.A. was stabbed by Brutus" (p. 46). "Another chapter in the tragedy of 1936," she adds, "was that the new Works Progress Administration was not taking all the so-called 'employables' off the relief rolls. The country, therefore, faced what the newspapers called a relief crisis but what those on relief called hunger and cold and eviction from their homes" (pp. 30-31).

In general Miss Abbott is extremely skeptical of the efficacy of a works program along the lines of W.P.A. While acknowledging the many constructive achievements of W.P.A., she insists that public works and not work relief should be the basis of future undertakings. "The democratic policy," she insists, "would be to provide public works with men and women employed not in accordance with their need but in accordance with their capacity as workers, and to provide full-time work. If we are to have selected groups, let the selection be on the basis of age rather than on need. Those who are past middle age will probably have the longest period of unemployment. . . . A public works program as well as W.P.A. can undertake a great variety of useful projects—small and large, construction and nonconstruction—and can operate both through contracts with construction companies or by direct employment. It will not give work to all the unemployed; neither, I remind you, has the Works Progress Administration been able to do this" (p. 44).

This then is the basis for insisting that direct relief on a national scale must always be part of a realistic policy of care for the unemployed. No works program can cover everyone. "W.P.A. has never provided work for all employables. The W.P.A. goal was not only impracticable—it was impossible. With

projects necessarily confined to those which will not compete with private industry and private employment, all the unemployed cannot be employed on any work-relief plan that anyone can provide . . ." (p. 42). The same would hold true for any system of public works.

The permanent scheme that Miss Abbott pictures includes, in addition to the unemployment benefits of the Social Security act and in addition to a public works program, continuous federal aid to the states and localities for relief. In place of spasmodic and grudging "emergency" grants, there would be a regular permanent system of allocations, and the costs would be met, not by borrowing as during 1933-35, but by general federal taxation. One can imagine the emphasis with which Miss Abbott would underscore her points were she alive today and facing the prospects of post-war unemployment. Two passages I believe Miss Abbott would particularly like to have us remember. One concerns the "unemployables." "The term 'employable,' " Miss Abbott reminds us, "depends on the labor market. . . . For example, during the war period, the so-called 'unemployables' whom we had in Chicago along Madison Street and Canal Street disappeared entirely; the queerest stick could get a job. . . . At the present time, when there are millions to pick from, it is easy to label anyone, whose appearance you do not happen to like, an unemployable" (pp. 221-22).

The other passage shows Miss Abbott's general philosophy of relief: "Unemployment may . . . be regarded in greater or less degree as the inevitable result of our industrial system. Our economic life is based upon it . . . industry counts on a reserve labor supply. . . . A democracy which supports this system should, therefore, make adequate and democratic provision for its victims, recognizing the cost of their care as the price it pays for the continuance of the capitalist system. Certainly those who profit most by this system should be the ones to insist that these costs be cheerfully met" (pp. 4-5).

Dorothy W. Douglas

Smith College

TITLES OF NEW BOOKS

Economic Theory: General Works

BARNES, H. E. and RUEDI, O. M. *The American way of life; our institutional patterns and social problems.* (New York: Prentice-Hall. 1942. Pp. xxi, 802. $5.)

BEER, M. *A history of British socialism.* 1-vol. ed. (New York: Norton. 1942. Pp. 482. $4.50.)

CADY, G. J. *Entrepreneurial costs and prices; a reconsideration of competitive and monopolistic market theory.* (Evanston: Chandler's. 1942. Pp. 227. $2.)

CLARK, C. *The economics of 1960.* (New York: Macmillan. 1942. $2.)

An estimate of future populations, production capacities, relative wage levels, import and export tendencies, etc., for the countries of the world.

GIFFORD, J. K. *Economics for commerce.* Misc. pub. no. 5. (Brisbane: Univ. of Queensland. 1942. Pp. ix, 417.)

JANDY, E. C. *Charles Horton Cooley, his life and his social theory.* (New York: Dryden Press. 1942. Pp. 327. $3.)

LOPEZ, J. R. *El gobierno de la riqueza.* (Montevideo: [Banco Hipotecario del Uruguay.] 1941. Pp. 20.)

LYON, H. *Determinants of the rate of interest.* (New York: Felsberg. 1942. Pp. 71. $1.)

MUKERJEE, R. *The institutional theory of economics.* Delhi Univ. pub. no. X. Sir Kikabhai Premchand lectures, 1939-40, Univ. of Delhi. (London: Macmillan. 1942. Pp. xv, 376. 10*s.* 6*d.*)

ROBINSON, J. M. *An essay on Marxian economics.* (New York: Macmillan. 1942. Pp. 131. $1.75.)

ROLL, E. *A history of economic thought.* Rev. and enl. Prentice-Hall econ. ser. (New York: Prentice-Hall. 1942. Pp. xii, 585. $4.)

WALSH, M. E. *American social problems.* Catholic Univ. of Am. student manual ser. (New York: Appleton-Century. 1942. Pp. 246. $2.)

A textbook for Catholic students.

Economic History

BISHOP, C. W. *Origin of the Far Eastern civilizations: a brief handbook.* Smithsonian Inst. war background stud., no. 1. (Washington: Smithsonian Inst. 1942. Pp. 53.)

DIETZ, F. C. *An economic history of England.* (New York: Holt. 1942. Pp. 628. $3.)

A college text.

DUTTON, W. S. *Du Pont: one hundred and forty years.* (New York: Scribner. 1942. Pp. 491. $3.75.)

EVANS, H. O. *Iron pioneer: Henry W. Oliver, 1840-1904.* (New York: Dutton. Pp. 383. $3.50.)

FAULKNER, H. U. and KEPNER, T. *America, its history and people; a unit organization.* 3rd ed. (New York: Harper. 1942. Pp. 904. $3.50.)

A new revised edition which not only brings the text up to date on the history of America through the beginning of 1942, but also is planned with six separate units to

make clearer the complexities of history. A Tabular Summary of American History is provided to show history in cross-section.

FORTESCUE, J. *De laudibus legum Anglie.* Edited and translated by S. B. CHRIMES. Cambridge stud. in legal hist. (New York: Macmillan. 1942. Pp. 349. $6.)

A critical study and translation of a 15th-century work in praise of the laws of England.

FREELAND, G. E. and ADAMS, J. T. *America's progress in civilization.* New frontier soc. sci. ser. (New York: Scribner. 1936-1942. Pp. 693. $1.60.)

HASEK, C. W., LEFFLER, G. L. and WATERS, R. H. *Industrial trends in Pennsylvania since 1914.* Pennsylvania State Coll. stud. no. 11. (State College: Pennsylvania State Coll. Council on Research. 1942. Pp. xi, 128.)

KNAPPEN, M. M. *Constitutional and legal history of England.* (New York: Harcourt Brace. 1942. Pp. 607. $3.25.)

KNOLES, G. H. *The presidential campaign and election of 1892.* Hist. econ. and pol. sci., vol. 5, no. 1. (Stanford University: Stanford Univ. Press. Pp. 268. $2.75; paper, $2.)

LEONHARDT, H. L. *Nazi conquest of Danzig.* (Chicago: Univ. of Chicago Press. 1942. Pp. 379. $3.50.)

An account of the events between 1933 and 1939 which led gradually to the nazification of the Free City of Danzig. The author was a practicing lawyer in Danzig from 1928 to 1938.

STEEN, R. W. *Twentieth century Texas; an economic and social history.* (Austin: Steck Co. 1942. Pp. 370. $3.)

TAYLOR, R. H. *Ante-bellum South Carolina; a social and cultural history.* James Sprunt stud. in hist. and pol. sci., vol. 25, no. 2. (Chapel Hill: Univ. of North Carolina Press. 1942. Pp. 210. $2.50; paper, $1.25.)

WERTENBAKER, T. J. *The golden age of colonial culture.* Anson G. Phelps lectureship on early Am. hist., New York Univ., Stokes Found. (New York: New York Univ. Press. 1942. Pp. 171. $3.)

Economic Systems; National Economies

BOEKE, J. H. *The structure of Netherlands Indian economy.* I.P.R. internat. research ser. (New York: Inst. of Pacific Relations. 1942. Pp. 211. $2.50.)

The author is a Dutch scholar who, prior to his arrest by the Nazis, was professor of tropical economics at the University of Leiden in Holland.

BOULDING, K. E. *New nations for old.* Pendle Hill pamph. no. 17. (Wallingford, Pa.: Pendle Hill. Pp. 40. 25c.)

CARR, E. H. *Conditions of peace.* (New York: Macmillan. Pp. 306. $2.50.)

Professor Carr analyzes the economic deficiencies which caused the pre-war crisis and applies this analysis to post-war prospects.

COATMAN, J. *India, the road to self-government.* (London: Allen and Unwin. New York: Norton. 1942. $1.75.)

CONDLIFFE, J. B. *Agenda for a postwar world.* (New York: Norton. 1942. Pp. 224. $2.50.)

DAVIES, H., editor. *The South American handbook, 1942; a year book and guide to the countries and resources of Latin America, inclusive of South and Central America, Mexico, and Cuba.* 19th annual ed. (New York: H. W. Wilson. 1942. Pp. 752. $1.)

DAVIES, R. A. and STEIGER, A. J. *Soviet Asia; democracy's first line of defense.* (New York: Dial Press. Pp. 384. $3.)

DUFFETT, W. E., and others. *India today; the background of Indian nationalism.* (New York: John Day. 1942. Pp. 173. $1.75.)

EMERSON, R. *The Netherlands Indies and the United States.* Am. looks ahead pamph. ser. no. 6. (Boston: World Peace Found. 1942. Pp. 92. 50c.)

FEIBLEMAN, J. *Christianity, communism and the ideal society; a philosophical approach to modern politics.* (New York: Norton. 1942. Pp. 419. $4.)

The author rejects both Christianity and communism as bases for the ideal society.

FRIEDRICH, C. J. *The new belief in the common man.* (Boston: Little Brown. 1942. Pp. xiii, 345. $3.)

GANGULEE, N., compiler. *The mind and face of Nazi Germany; an anthology.* Foreword by EDWARD BENES. (Forest Hills, N.Y.: Transatlantic Arts. 1942. Pp. 196. $1.50.)

A compilation from writings and speeches of responsible Nazis.

GOSLIN, R. C. A., and others. *American democracy today and tomorrow.* (New York: Harcourt Brace. 1942. Pp. 589. $2.12.)

HAGEN, P. *Will Germany crack? a factual report on Germany from within.* Translated (from the German) by ANNA CAPLES; introduction by ELMER DAVIS. (New York: Harper. 1942. Pp. 300. $2.75.)

The research director of The American Friends of German Freedom, publishers of the "Inside Germany Reports," presents detailed information on Germany's internal situation, describing the changes in Germany since the invasion of Russia in an attempt "to illustrate and bring the difficulties in which the Hitler regime finds itself into sharper focus."

HAMM, W. A. *The American people.* Heath's correlated soc. stud. (Boston: Heath. 1942. Pp. 1135. $2.20.)

HEDIGER, E. S. *Nazi exploitation of occupied Europe.* Foreign policy repts., vol. 18, no. 6. (New York: Foreign Policy Assoc. 1942. Pp. 14. 25c.)

HUXLEY, J. *Reconstruction and peace.* (New York: New Republic. 1942. Pp. 47. 25c.)

LA FOY, M. *India's rôle in the world conflict.* (New York: Foreign Policy Assoc. Pp. 11. 25c.)

LILIENTHAL, P. E. and OAKIE, J. H. *Asia's captive colonies.* Far Eastern pamph. no. 6. (New York: Inst. of Pacific Relations. Pp. 48. 10c.)

LOEWENSTEIN, K. *Brazil under Vargas.* (New York: Macmillan. 1942. Pp. 400. $2.75.)

MACDONALD, C. and MACDONALD, G. *Freeing democracy; a new world challenge.* (New York: New World Press. 1942. Pp. 106. $1.)

MACKINDER, H. J. *Democratic ideals and reality; a study in the politics of reconstruction.* Introduction by EDWARD MEAD EARLE; foreword by MAJOR GEORGE FIELDING ELIOT. (New York: Holt. 1942. Pp. 245. $1.90.)

MASANI, M. *Our India* (New York: Oxford Univ. Press. 1942. Pp. 166. $1.75.)

A patriotic economic primer.

MILLS, L. A. *British rule in eastern Asia; a study of contemporary government and economic development in British Malaya and Hong Kong.* I.P.R. internat. research ser. (Minneapolis: Univ. of Minnesota Press. 1942. Pp. 589. $5.)

MITCHELL, K. L. *India without fable; a 1942 survey.* (New York: Knopf. Pp. 315. $2.50.)

MUNRO, D. G. *The Latin American republics; a history.* Century hist. ser. (New York: Appleton-Century. 1942. Pp. 659. $4.)

PRICE, W. D. M. *Japan rides the tiger.* (New York: John Day. 1942. Pp. 238. $2.50.)

RAMASWAMY, T. N. *The economic problem of India.* (Bombay: New Book Co., Hornby Rd. 1942. Pp. xv, 308. Rs. 10/.)

REVES, E. *A democratic manifesto.* (New York: Random. 1942. Pp. 144. $1.50.)

RÖPKE, W. *Die gesellschaftskrisis der gegenwart.* (Erlenbach-Zurich: Eugen Rentsch. 1942. Pp. 410.)

STEMBRIDGE, J. H. *An atlas of the U.S.S.R.* Am. in a world at war, no. 27. (New York: Oxford. 1942. Pp. 34. 10c.)

STALIN, J. *The war of national liberation.* (New York: Internat. Pubs. 1942. Pp. 61. 75c.)
Wartime addresses of the Soviet premier.

TAWNEY, R. H. *Why Britain fights.* War pamph. no. 13. (New York: Macmillan. 1942. Pp. 46. 10c.)

TEMPLE, W. *Christianity and social order.* (New York: Penguin books. 1942. Pp. 93. 25c.)
The Archbishop of Canterbury discusses the rôle of Christianity in the establishment of a world order based on freedom from want and on freedom of thought.

WARD, B. *Turkey.* World today ser. (New York: Oxford. 1942. Pp. 121. $1.)

WHITE, J. W. *Argentina; the life story of a nation.* (New York: Viking. Pp. 377. $3.75.)

WHYTE, F. *Japan's purpose in Asia.* (New York: Oxford. Pp. 61. 25c.)

WILLIAMS, F. *Dynamic democracy.* War pamph. no. 15. (New York: Macmillan. 1942. Pp. 32. 10c.)

YOUNG, G. *Federalism and freedom or plan the peace to win the war.* (London: Oxford Univ. Press. 1941. Pp. xvi, 204. $2.50.)

Know the U. S. S. R.; readings on the Soviet Union. (New York: Am. Council on Soviet Relations. Gratis.)

A word on the future to British socialists. Issued by a committee of the Fabian Society, tract ser. no. 256. (London: Fabian Society. 1942. Pp. 24. 6*d*.)

Statistics; Economic Mathematics; Accounting

ASHLEY, C. A. *Introduction to accounting for students of economics.* (Toronto: Univ. of Toronto Press. 1942. Pp. viii, 136. $1.50.)

BLOCKER, J. G. *Essentials of cost accounting.* Abridgment of *Cost Accounting.* McGraw-Hill accounting ser. (New York: McGraw-Hill. Pp. 442. $3.)

CARLSON, P. A., and others. *Dictionary of bookkeeping and accounting terminology.* (Cincinnati: South-Western Pub. Co. 1942. Pp. 31. 10c.)

DYESS, W. B. and GILMORE, R. O. *Mathematics of business and finance;* including compound interest and annuity tables by F. C. KENT and M. E. KENT. (New York: McGraw-Hill. Pp. 453. $3.50.)

ELWELL, F. H., and others. *Business record-keeping; advanced course.* (Boston: Ginn. 1942. Pp. 404. $1.60.)

FINNEY, H. A. *Corporation and manufacturing accounting.* Prentice-Hall accounting ser. (New York: Prentice-Hall. 1942. Pp. 542. $4.65.)

HANSON, A. W. *Auditing; theory and its application.* Harvard problem books. (New York: McGraw-Hill. 1942. Pp. 500. $4.)

JACKSON, J. H. *Accounting principles; a pathfinder course.* (Los Angeles: Hadley. Pp. 782. $4.80.)
A textbook designed for the student taking his first year of accounting in college. The author is professor of accounting and dean of the Graduate School of Business at Stanford University.

KENNEDY, D. D., and others. *Introductory accounting.* (New York: Ronald Press. 1942. Pp. 717. $4.50.)

LAWRENCE, W. B. *Cost accounting for war production.* Prentice-Hall accounting ser. (New York: Prentice-Hall. 1942. Pp. 363. Trade edition, $4.65; school edition, $3.50.)

MASON, P. *Fundamentals of accounting.* 2 vols. Univ. bus. econ. ser. (Chicago: Foundation Press. 1942. Pp. 735. $4.75; leather cloth edition, $4.25.)

MIGONE, R. C., editor. *Interamerican statistical yearbook—1941.* (New York: Macmillan. 1942. $6.)

This reference book gives the fullest available statistics on commerce, population, livestock, mineral and vegetable production, transport and communication, investments, banks and currencies, finance, social questions, hygiene, public education, armed forces, and international coöperation; these figures are for Canada, the United States, Mexico, and all South and Central American nations. The yearbook is published under the auspices of the Argentine Commission of the International Studies Conference.

NEUNER, J. J. W. *Cost accounting; principles and practice.* Rev. ed. (Chicago: Richard D. Irwin. 1942. Pp. 835. $4.25.)

———. *Industrial cost accounting; an intensive course.* (Chicago: Richard D. Irwin. Pp. 487. $3.50.)

A condensed version of the author's revised edition of *Cost Accounting* arranged to meet the requirements of short courses.

ROSENBERG, R. R. *Teaching methods and testing materials in business mathematics.* 2nd ed. Bus. mathematics ser. (New York: Gregg. Pp. 321. $1.20.)

Statistical abstract of the United States, 1941: official compendium of the federal government. 63rd annual ed. (Washington: Supt. Docs. 1942. Pp. 1056. $1.50.)

Assembled in this one compact volume is information on most of the important phases of the social, economic, and industrial life of the Nation. Many of the statistical tables give figures from the earliest available dates, and are useful in the study of long-time trends.

Uniform system of accounts for carriers by water prescribed by Interstate Commerce Commission in accordance with sec. 313 of Part 3 of Interstate Commerce act. 1st rev. issue, effective Jan. 1, 1942. (Washington: Supt. Docs. 1942. Pp. 112. 20c.)

Business Cycles and Fluctuations

Can we avoid a post-armament depression? A survey of opinions submitted by members of the American Economic Association. (New York: Nat. Assoc. of Manufacturers. Pp. 70.)

Public Finance; Fiscal Policy; Taxation

CRUM, W. L., FENNELLY, J. F. and SELTZER, L. H. *Fiscal planning for total war.* Fiscal pol. ser. no. 1. (New York: Nat. Bur. Econ. Research. 1942. Pp. xxv, 358. $3.)

FISHER, I. and FISHER, H. W. *Constructive income taxation: a proposal for freedom.* (New York and London: Harper. 1942. Pp. xiv, 277. $3.)

LELAND, S. E. and LUTZ, H. L. *When authorities disagree: financing World War II; an experimental technique applied to conflicting views.* (New York: Public Affairs Committee. 1942. Pp. 47. 25c.)

MERING, O. O. v. *The shifting and incidence of taxation.* (Philadelphia: Blakiston. 1942. Pp. xiii, 262. $3.25.)

Revenue revision of 1942: hearings, 77th Cong., 2nd sess., on revenue revision of 1942. Rev. March, 1942. Vol. 1; Vol. 2. Ways and Means Committee, House. (Washington: Supt. Docs. 1942. Pp. 1220; 1181. $1.50; $1.25.)

Money and Banking; Short-Term Credit

DILLISTIN, W. H., compiler. *Directory of New Jersey banks, 1804-1942,* (Moorestown, N.J.: New Jersey Bankers Assoc. Pp. 106. $1.25.)

Foulke, R. A. ***Credit problems in a war economy.*** (New York: Dun and Bradstreet. 1942. Pp. 71.)

Halm, G. N. ***Monetary theory: a modern treatment of the essentials of money and banking.*** (Philadelphia: Blakiston. 1942. Pp. 347. $3.50.)

Zarker, H. E. ***Conversion of commercial bank funds; a plan to provide for liquidity and flexibility of funds and the stabilization of profits in commercial banking.*** (Cambridge: Bankers Pub. Co. Pp. 84. $1.50.)

Bank management problems during wartime. Proc. of third New Hampshire bank management conference, held at Dartmouth College, June 5 and 6, 1942. (Hanover: Dartmouth Coll., Amos Tuck School of Bus. Admin. 1942. Pp. 76. $1.)

Federal Reserve act: hearings, 77th Cong., 2nd sess., on H. R. 7158, to amend the Federal Reserve act, June 17 and 19, 1942. Banking and Currency Committee, House. (Washington: Supt. Docs. 1942. Pp. 64. 10c.)

Money and banking, 1940-42. League of nations pub. 1942, II.A.1. (New York: Internat. Documents Serv., Columbia Univ. Press. 1942. Pp. 202. $3.)

International Trade, Finance and Economic Policy

Bendiner, R. ***The riddle of the State Department.*** (New York: Farrar and Rinehart. 1942. Pp. 244. $2.)

Budd, J. F. ***Custom house guide; 1942 edition.*** (New York: Custom House Guide, Box 7, Sta. P. 1942. Pp. 1500. $15.)

Burgin, M. ***El problema de la tarifa y la política arancelaria bajo el régimen federal.*** Apartado del ***Anuario de Historia Argentina,*** Vol. II (1940), editado por la Sociedad de Historia Argentina. (Buenos Aires: Sociedad de Historia Argentina. 1941. Pp. 32.)

Dennison, E. E. ***The senate foreign relations committee.*** (Stanford University: Stanford Univ. Press. 1942. Pp. 219. $2.50.)

Einzig, P. ***Appeasement before, during and after the war.*** (New York: Macmillan. 1942. Pp. 227. $2.50.)

Ellinger, W. B. and Rosinski, H. ***Sea power in the Pacific, 1936-1941; a selected bibliography of books, periodical articles, and maps from the end of the London Naval Conference to the beginning of the war in the Pacific.*** (Princeton: Princeton Univ. Press. 1942. Pp. 94. $1.)

Falnes, O. J. ***The future of the small states.*** Problems of post-war reconstruction ser. (Washington: Am. Council on Public Affairs. 1942. Pp. 21.)

Green, P. L. ***Pan American progress.*** (New York: Hastings House. 1942. Pp. 224. $2.)

Hanna, P. L. ***British policy in Palestine.*** Introduction by Josephus Daniels. (Washington: Am. Council on Public Affairs. 1942. Pp. 227. $3.50; paper, $3.)

Hula, E. ***Pan Americanism; its Utopian and realistic elements.*** Problems of post-war reconstruction ser. (Washington: Am. Council on Public Affairs. 1942. Pp. 22.)

Jordan, H. P. ***Hemisphere policy as implemented by economics.*** Problems of post-war reconstruction ser. (Washington: Am. Council on Public Affairs. 1942. Pp. 30.)

Logan, R. W. ***The operation of the mandate system in Africa, 1919-27.*** (Washington: Found. Pub. 75c.)

Mattern, J. ***Geopolitik, doctrine of national self-sufficiency and empire.*** Stud. in hist. and pol. sci., ser. 60, no. 2. (Baltimore: Johns Hopkins Press. 1942. Pp. xiv, 139. $2; paper, $1.50.)

Muzumdar, H. T. ***The united nations of the world; a treatise on how to win the peace.*** (New York: Universal Pub. 1942. Pp. 288. $2.50.)

Perham, M. *African and British rule.* (New York: Oxford. 1942. Pp. 106. 45c.)

Sammons, R. L. and Abelson, M. *American direct investments in foreign countries—1940.* Bur. of For. and Dom. Comm., econ. ser., no. 20. (Washington: Supt. Docs. 1942. Pp. vi, 43. 10c.)

Strausz-Hupé, R. *Geopolitics; the struggle for space and power.* (New York: Putnam. 1942. Pp. 287. $2.75.)

An analytical discussion of the master plan of world conquest and domination drawn up originally by Karl Hausofer.

Strong, A. M. *The trading with the enemy act as it relates to financial transactions.* (New York: Author, c/o Public Nat. Bank and Trust Co., 37 Broad St. 1942. Pp. 10.)

Thiesing, T. *Control of foreign-owned property in the United States; an analysis of executive orders and regulations.* (New York: Author, 20 Exchange Pl. Pp. 40. $1.)

Digest of international law. Vol. 3, chaps. 9-11. State Dept. (Washington: Supt. Docs. 1942. Pp. 820. $2.)

Foreign commerce and navigation of the United States for the calendar year 1940. Div. For. Trade Stat., U. S. Dept. of Comm. (Washington: Supt. Docs. 1942. Pp. 985. $2.75.)

Gouvernements nationaux et accords internationaux, l'extension des compétences des autorités exécutives à l'occasion d'accords internationaux, dans quelques états. (Geneva: Georg. Librairie de l'Université. 1942. Pp. 168.)

International traffic in arms, regulations issued June 2, 1942, by Secretary of State, governing registration and licensing under sec. 12 of joint resolution approved Nov. 4, 1939, and related laws. 8th ed. State Dept. (Washington: Supt. Docs. 1942. Pp. 51. 10c.)

Laws and regulations affecting control of persons entering and leaving the United States, Feb. 1, 1942. State Dept. (Washington: Supt. Docs. 1942. Pp. 43. 10c.)

Papers relating to the foreign relations of the United States, 1927. Vols. 1, 2. State Dept. (Washington: Supt. Docs. 1942. Pp. 565; 841. $1.50; $2.)

Third meeting of ministers of foreign affairs of the American republics, Rio de Janeiro, Brazil, January 15-28, 1942; text of final act. Introduction by Sumner Welles. (New York: Carnegie Endowment for Internat. Peace. Pp. 46. 5c.)

Treaties and other international acts of the United States of America. Vol. 6. *Documents 152-72, 1852-55.* State Dept. (Washington: Supt. Docs. 1942. Pp. 886. $3.25.)

Treaties submitted to the Senate, 1941. State Dept. (Washington: Supt. Docs. 1942. Pp. 13. 10c.)

Procedure during 1941 on certain treaties submitted to the Senate 1923-1941 and their status as of Dec. 31, 1941.

World organization; a balance sheet of the first great experiment. Inst. on world organization. (Washington: Am. Council on Public Affairs. 1942. Pp. 440. $3.75.)

Business Finance; Insurance; Investments; Securities Markets

Berle, A. A., Jr. and Magill, R. *Cases on corporation finance.* New ed. (St. Paul: West Pub. Co. Pp. 930. $6.50.)

Cain, J. H. *College and university investments and income.* (Washington: Am. Council on Education.)

Jacoby, N. H. and Saulnier, R. J. *Term lending to business.* Finan. res. program stud. in bus. finan. (New York: Nat. Bur. Econ. Research. 1942. Pp. xvii, 163. $2.)

Kelliher, F., editor. *American bankruptcy reports.* New ser., vol. 48. (Albany: M. Bender. 1942. Pp. 934. $6.)

MAGEE, J. H. *General insurance*. Rev. ed. (Chicago: Richard D. Irwin. 1942. Pp. 830. $4.25.)

REIMAN, G. *The financial fifth column*. (New York: Vanguard Press. 1942. $2.50.)

SEILER, O. *Die Erbebenversicherung*. (Basel: Verlag für Recht und Gesellschaft. 1942. Pp. 93. *c.* $1.)

STONE, M. F. *A short history of life insurance*. (Indianapolis: Insurance Research and Review Service. 1942. Pp. 92. $1.25.)

TAYLOR, W. B. *Financial policies of business enterprise*. Century stud. in econ. (New York: Appleton-Century. 1942. Pp. 888. $4.25.)

WORMSER, R. A. *Personal estate planning in a changing world*. (New York: Simon and Schuster. Pp. 333. $2.50.)

Investment trusts and investment companies: report of the Securities and Exchange Commission, pursuant to sec. 30 of Public Utility Holding Company act of 1935. Part 3, chap. 7. *Abuses and deficiencies in the organization and operation of investment trusts and investment companies.* Securities and Exchange Commission. (Washington: Supt. Docs. 1942. Pp. 320. 35c.)

Discusses the various abuses and problems in connection with the management and portfolio activities of investment companies.

New York insurance report: eighty-second annual report of the Superintendent of Insurance, for the year ended December 31, 1940. Vol. II. *Fire and marine insurance companies.* Legislative doc. (1941), no. 34. (Albany: State of New York Insurance. 1942. Pp. 181a, 1306.)

Railroad obligations: hearings, 77th Cong., 2nd sess., to amend the bankruptcy act, Apr. 29, 1942. Judiciary Committee, House. (Washington: Supt. Docs. 1942. Pp. 82. 10c.)

Securities act and Securities Exchange act: hearings, 77th Cong., 1st and 2nd sessions, on comparative print showing proposed changes in the Securities act of 1933 and the Securities Exchange act of 1934; and H. R. 4544, H. R. 5065, and H. R. 5832, relating to proposed amendments to the Securities act of 1933 and to Securities Exchange act of 1934. Parts 1-6. *Oct., 1941-May, 1942.* Interstate and Foreign Commerce Committee, House. (Washington: Supt. Docs. 1942. Pp. 1645. 35c; 35c; 35c; 20c; 25c; 15c.)

Part 6 contains complete index.

Public Control of Business; Public Administration; National Defense and War

ARNOLD, T., and others. *War profits*. Round table broadcast. (Chicago: Univ. of Chicago. 1942. Pp. 26. 10c.)

BAUR, F. T. VOM. *Federal administrative law*. 2 vols. (Chicago: Callaghan. 1942. Pp. 1090. $15.)

BEER, H. W. *Federal trade law and practice before the Federal Trade Commission*. (New York: Baker, Voorhis. 1942. Pp. 1028. $15.)

BYE, R. T. and KRAVIS, I. B. *Economic problems of war*. (New York: Crofts. 1942. 60c.)

CHAMBERLAIN, J. P., and others. *The judicial function in federal administrative agencies*. (New York: Commonwealth Fund. Pp. 270. $3.)

CUSHMAN, R. E. *What's happening to our Constitution?* Pub. affairs pamph., no. 70. (New York: Pub. Affairs Committee. 1942. Pp. 34. 10c.)

DANIEL, E. G. *Price control*. (Eugene: Bur. of Bus. Research, Univ. of Oregon. 1942. Pp. 31.)

EBERHART, J., and others. *Politics in wartime*. Round table broadcast. (Chicago: Univ. of Chicago. Pp. 28. 10c.)

FOLK, G. E. *Patents and industrial progress; a summary, analysis, and evaluation of the records on patents of the Temporary National Economic Committee.* Foreword by ROBERT L. LUND. (New York: Harper. 1942. Pp. 406. $3.)

FRANCK, L. *French price control from Blum to Pétain.* Pamph. no. 43. (Washington: Brookings Inst. 1942. Pp. 57. 50c.)

FRIEDRICH, C. J. and MASON, E. S., editors. *Public policy: a yearbook of the Graduate School of Public Administration, Harvard University, 1942.* (Cambridge: Graduate School of Pub. Admin., Harvard Univ. 1942. Pp. vii, 275. $3.)

Contents: Part I—War Morale and Civil Liberties: "Morale and its measurement," by G. W. Allport; "The integration of morale," by E. L. Bernays; "Civil liberties in a period of transition," by D. Riesman; "The administration and civil liberties in war-time," by A. B. Overstreet. Part II—Labor and the War: "Mobilization of labor resources for the defense effort," by D. H. Davenport; "The national defense labor policy—supply, wages, and strikes," by E. G. Latham; "Labor disputes during the war," by C. E. Wyzanski, Jr. Part III—Some problems of War Finance and Government: "The rôle of statistical forecasts in planning for defense," by J. Tobin; "The control of industrial mobilization," by W. C. Grover; "National defense and local government: a case study of the Quincy, Mass., area," by L. L. Barber, Jr.; "Changes in economic structure arising out of the war and their implications for public policy," by A. H. Hansen.

HANNAY, A. M., compiler. *Rationing; a selected list of references.* U. S. Dept. of Agric. Lib., list no. 3. (Washington: U. S. Dept. of Agric. Pp. 60, mimeographed.)

HARRIS, S. E. *The economics of America at war.* (New York: Norton. 1942. Pp. 448. $3.50.)

An enlarged and revised edition of *The Economics of American Defense.*

JORDAN, H. P., editor. *Problems of post-war reconstruction.* Foreword by STEPHEN DUGGAN. (Washington: Am. Council on Public Affairs. 1942. Pp. xix, 292. Cloth, $3.25; paper, $2.75.)

KJELLSTROM, E. T., and others. *Price control; the war against inflation.* (New Brunswick: Rutgers Univ. Press. 1942. Pp. 171. $2.50.)

LEISERSON, A. *Administrative regulation; a study in representation of interests.* Stud. in pub. admin., vol. 13. (Chicago: Univ. of Chicago Press. 1942. Pp. 305. $3.)

OGDON, M. *British food administration.* U. S. Dept. of Agric., Office of For. Agric. Rel. (Washington: Supt. Docs. 1942. Pp. 18. 10c.)

PARKER, R. S. *Public service recruitment in Australia.* (Melbourne: Melbourne Univ. Press. New York: G. E. Stechert. 1942. Pp. 296. $2.50.)

PATTERSON, E. M., editor. *Winning both the war and the peace.* Annals, vol. 222. (Philadelphia: Am. Acad. Pol. and Soc. Sci. 1942. Pp. vii, 252. Paper, $2; cloth, $2.50.)

PONTIUS, D. *State supervision of local government, its development in Massachusetts.* Introduction by LEVERETT SALTONSTALL. (Washington: Am. Council on Pub. Affairs. 1942. Pp. 176. $3.25.)

POUND, R. *Administrative law; its growth, procedure and significance.* (Pittsburgh: Univ. of Pittsburgh Press. 1942. Pp. 149. $1.85.)

ROBSON, W. A. *The government and misgovernment of London.* (New York: Norton. 1942. Pp. 484. $4.50.)

This detailed and analytical study of municipal administration in London covers the past, the present, and looks into the future.

SKAR, R. O. and PALMER, B. W. *Business law: with social and personal application.* (New York: McGraw-Hill. 1942. Pp. xiii, 478. $2.50.)

STEINER, G. A., editor. *Economic problems of war.* (New York: Wiley. 1942. Pp. xi, 400. $3.50.)

TINLEY, J. M. *Control of food prices.* Food in wartime. (Berkeley: Univ. of California Press. Pp. 33. 25c.)

TWISS, B. R. *Lawyers and the Constitution; how laissez-faire came to the Supreme Court.* Foreword by EDWARD S. CORWIN. (Princeton: Princeton Univ. Press. 1942. Pp. 283. $2.50.)

UHLER, A. *Review of administrative acts; a comparative study of the doctrine of the separation of powers and judicial review in France and the United States.* Mich. legal stud. (Chicago: Callaghan. 1942. Pp. 238. $3.)

VERNON, R. V. and MANSERGH, N., editors. *Advisory bodies; a study of their uses in relation to central government, 1919-1939.* Preface by SIR ARTHUR SALTER. Oxford Univ. pol. research committee. (New York: Norton. 1942. Pp. 520. $5.)

WILCOX, J. K. *Official war publications guide to state, federal, and Canadian publications.* 2nd suppl. to *Official defense publications.* (Berkeley: Bur. of Pub. Admin., Univ. of California. 1942. Pp. 213.)

WRIGHT, C. W., editor. *Economic problems of war and its aftermath.* (Chicago: Univ. of Chicago Press. 1942. Pp. xi, 197. $2.)

WRIGHT, Q. *A study of war.* Vols. I and II. (Chicago: Univ. of Chicago Press. 1942. Pp. xxiii, 678; xvii, 871. $15.)

ZINK, H. *Government and politics in the United States.* (New York: Macmillan. 1942. Pp. 1104. $4.)

Alphabetical list of federal World War agencies, 1914-21. (Washington: The National Archives. 1942. Pp. ii, 124.)

The book of the states. (Chicago: The Council of State Government, 1313 E. 60th St. 1942. Pp. 423. $3.50.)

Federal price control, July 1, 1940-Feb. 10, 1942; an indexed digest by subject. Price Administration Office. (Washington: Supt. Docs. Pp. 127. 20c.)

Food control in Great Britain. Internat. Labour Office stud. and rept., ser. B (econ. conditions), no. 35. (Washington: Internat. Lab. Office. 1942. Pp. vi, 272. $1.25.)

National Defense act, approved June 3, 1916, as amended to Jan. 1, 1942 inclusive with related acts and notes. Military Affairs Committee, Senate. (Washington: Supt. Docs. 1942. Pp. 152. 20c.)

National defense program: hearings, 77th Cong., 1st sess., S. Res. 71, authorizing and directing an investigation of the national defense program. Parts 9. *Nov. and Dec., 1941, ordnance plant construction. Wolf Creek ordnance plant and Milan ordnance depot, Milan, Tenn.* Special Committee Investigating the National Defense Program, Senate. (Washington: Supt. Docs. 1942. Pp. 825. 90c.)

Patents: hearings, 77th Cong., 2nd. sess., on S. 2303, bill to provide for use of patents in interest of national defense or the prosecution of the war, and for other purposes; S. 2491, bill to amend the patent laws, to prevent suppression of inventions, to promote the progress of science and the useful arts, and for other purposes. Part 1. *Apr. 13-17, 1942.* Part 3. *Apr. 27-May 2, 1942.* Part 4, *May 4-8, 1942.* Patents Committee, Senate. (Washington: Supt. Docs. 1942. Pp. 662; 528; 274. 70c; 60c; 30c.)

Relief of dealers: hearings, 77th Cong., 2nd sess., on S. 2315, for the relief of dealers in certain articles or commodities rationed under authority of the United States, Apr. 8 and 22, 1942. Banking and Currency Committee, Senate. (Washington: Supt. Docs. 1942. Pp. 56. 10c.)

Summary of major legislation and of federal court decisions on its constitutionality during the 1st session of the 77th Congress. 77th Cong., 2d sess., S. Doc. 203. (Washington: Supt. Docs. 1942. Pp. 29. 10c.)

Supplemental to S. Doc. 29, 77th Congress, 1st session.

Supplementary report on war courses offered by collegiate schools of business and departments of economics. (Washington: Bur. of Foreign and Domestic Commerce, U. S. Dept. of Commerce. 1942. Pp. 107.)

Industrial Organization; Price and Production Policies; Business Methods

ALDERFER, E. V. and MICHL, H. E. *Economics of American industry.* Bus. and econ. pub. (New York: McGraw-Hill. Pp. 581. $4.)

ANDERSON, A. G., and others. *Industrial management.* (New York: Ronald Press. 1942. Pp. 635. $4.50.)
A revision of *Industrial Engineering and Factory Management.*

ANSHEN, M., and associates. *An introduction to business.* (New York: Macmillan. 1942. Pp. 651. $4.)

BROOK, D. *The wool industry in war and peace; a study in control and concentration.* Research ser. no. 65. (London: Fabian Society and Victor Gollancz, Ltd. 1942. 6d.)

NEAL, A. C. *Industrial concentration and price inflexibility.* Foreword by F. C. MILLER. (Washington: Am. Council on Public Affairs. 1942. Pp. x, 173. Cloth, $3.25; paper, $2.75.)

VEITH, M. D., compiler. *American business directories.* U. S. Dept. of Commerce inquiry reference serv. (Washington: Supt. Docs. 1942. Pp. 76.)

Small business: hearings, 77th Cong., 2nd sess., on S. 2250 and H. R. 6975 to mobilize the productive facilities of small business in the interests of successful prosecution of the war, and for other purposes, Apr. and May, 1942. Banking and Currency Committee, House. (Washington: Supt. Docs. 1942. Pp. 250. 25c.)

Marketing; Domestic Trade

AGNEW, H. E., and others. *Outlines of marketing.* 2nd ed. (New York: McGraw-Hill. 1942. Pp. 426. $3.)

BLISS, C. A. *Operating results of department and specialty stores.* Contains also *Department store financial requirements, 1920-1940,* by PEARSON HUNT and ALBERT R. KOCH. Bur. of bus. research bull. no. 115. (Boston: Harvard Univ., Graduate School of Bus. Admin. 1942. Pp. vi, 62. $2.50.)

BURNHAM, E. A. *Expenses and profits of limited price variety chains in 1941.* Bur. of bus. research bull. no. 116. (Boston: Harvard Univ., Graduate School of Bus. Admin. 1942. Pp. vi, 36. $1.)

GAULT, E. H., editor. *Marketing under war conditions.* Proc. of mid-year convention of the American Marketing Association, Ann Arbor, June 12 and 13, 1942. Mich. bus. papers, no. 12. (Ann Arbor: Univ. of Michigan, Bur. of Bus. Research. 1942. Pp. 52. $1.)

HAWKINS, E. R. *Effects of the war on British marketing; a guide for American business.* U. S. Dept. of Commerce, Bur. of For. and Dom. Comm. econ. ser. no. 18. (Washington: Supt. Docs. 1942. Pp. 74. 15c.)

PYLE, J. F. *Marketing management.* (Ypsilanti, Mich.: Univ. Litho-printers. 1942. Pp. 409. $3.)

SPRIEGEL, W. R. *Replacement demand for automobile tires.* Univ. microfilms pub. no. 383. (Ann Arbor: Univ. of Michigan Microfilms. Pp. 143. $1.79.)

TINLEY, J. M. *Wartime transportation and distribution of foods.* Food in wartime. (Berkeley: Univ. of California Press. Pp. 26. 25c.)

WISEMAN, M. *The anatomy of advertising.* Vol. 2, *Advertisement making.* (New York: Harper. Pp. 188. $3.)

Rate and circulation study of 417 class, trade and technical publications (A). 9th ed. (New York: Assoc. of Nat. Advertisers. 1942. Pp. 69. $3.)

Sales management trends and practices. (Chicago: Dartnell Corp. 1942. Pp. 200. $12.50.)

Mining; Manufacturing; Construction

CASEY, K. P., compiler. *Bituminous coal handbook.* (Albany: M. Bender. 1942. Pp. 433. $5.)

DRAKE, L. A. and GLASSER, C. *Trends in the New York clothing industry; a study undertaken for the Mayor's Business Advisory Committee and the Committee of Fifteen.* (New York: Inst. of Pub. Admin. 1942. Pp. 181. $2.50.)

GRIFFITHS, J. *Coal; between two wars.* Foreword by WILL LAWTHER. (London: The Labour Party. 1942. Pp. 24. 2*d.*)

HAYNES, W. and HAUSER, E. A. *Rationed rubber, and what to do about it.* (New York: Knopf. Pp. 187. $1.75.)

Economic conditions in the anthracite coal regions: letter from the Federal Anthracite Coal Commission transmitting the report of the commission, April 21, 1942. Federal Anthracite Coal Commission. 77th Cong., 2nd sess., H. Doc. 709. (Washington: Supt. Docs. 1942. Pp. vii, 18.)

Mines register. Vol. 21, 1942, *describing the non-ferrous metal mining companies in the western hemisphere.* (New York: Atlas Pub. Co., 133 W. 21st St. 1942. Pp. 742. $15.)

Transportation; Communication; Public Utilities

ALBION, R. G. and POPE, J. B. *Sea lanes in wartime; the American experience (1775-1942).* (New York: Norton. 1942. Pp. 288. $3.)

BAUER, H. C., compiler. *An indexed bibliography of the Tennessee Valley Authority, supplement January-December, 1941.* (Knoxville: Tenn. Valley Authority. 1942. Pp. 21, mimeographed.)

BUCKWALTER, W. R. *Regulation of utility valuation in Pennsylvania.* (Philadelphia: Author, Box 168, Temple University. 1942. Pp. 328. $3.50.)

LORENTZEN, O. *Norway, Norwegian shipping and the war.* Am. in a world at war, no. 25. (New York: Oxford. 1942. Pp. 32. 10c.)

MALOTT, E. O. *The Hoch-Smith resolution; a study of a congressional mandate on transportation.* Agric. hist. ser. no. 4. (Washington: Bur. of Agric. Econ., U. S. Dept. of Agric. 1942. Pp. vi, 117.)

TALBOT-BOOTH, E. C., compiler and editor. *Merchant ships: 1941.* (New York: Macmillan. 1942. Pp. $19.)

Federal Communications Commission. Vol. 7. *Decisions and reports of the Federal Communications Commission of the United States, Mar. 1, 1939-Feb. 29, 1940.* (Washington: Supt. Docs. 1942. Pp. 695. $1.50.)

Florida pipe line: hearings, 77th Cong., 2nd sess., on S. 2426 and H. R. 6999, June and July, 1942. Commerce Committee, Senate. (Washington: Supt. Docs. 1942. Pp. 210. 25c.)

Inland waterways: hearings, 77th Cong., 2nd sess., pursuant to S. Res. 241, to investigate whether the use of inland waterways for the transportation of petroleum products and other commodities may be increased. May and June, 1492. Commerce Committee, Senate. (Washington: Supt. Docs. 1942. Pp. 238. 25c.)

Investigation of railroad holding companies and affiliated companies: hearings, 75th Cong., 3rd sess., pursuant to S. Res. (74th Cong.). Part 29. *Pennsylvania Railroad Company—*

activities in connection with the Transportation act of 1920. (Washington: Supt. Docs. 1942. Pp. xiv, 12667-976.)

New principles in urban transportation economy; the transportation problem in the city of Buenos Aires. 2nd ed., rev. (Buenos Aires: Transport Control Committee. 1941. Pp. 128.)

Report of chief of engineers, U. S. Army, 1941. Part. 1, vol. 1, *1941;* vol. 2, *1942.* Part 2. *Commercial statistics, water-borne commerce of United States for the calendar year 1940.* (Washington: Supt. Docs. 1942. Pp. 1096, 1198; 1509. $1.75, $1.75; $2.)

Roads: hearings, 77th Cong., 2nd sess., on H. R. 6908, to amend the Defense Highway act of 1941. Apr., 1942. Roads Committee, House. (Washington: Supt. Docs. 1942. Pp. 103. 15c.)

Routemaster, The; a nationwide motor freight routing guide, united index of motor carrier stations. (Chicago: Brandt Corp., 1811 Prairie Ave. 1942. Pp. 542. $12.)

Sixteenth census of the United States, 1940, manufactures, 1939: Power equipment and energy consumption. Census Bureau. (Washington: Supt. Docs. 1942. Pp. 61. 15c.)

Statistics of class 1 motor carriers, for year ended Dec. 31, 1940; compiled from annual reports of motor carriers of property and motor carriers of passengers, filed with Interstate Commerce Commission. Interstate Commerce Commission. (Washington: Supt. Docs. 1942. Pp. 77. 30c.)

Statistics of railways in the United States for the year ended Dec. 31, 1940, including also selected data relating to other common carriers (except motor carriers) subject to the Interstate Commerce act for the year 1940: 54th annual report. Interstate Commerce Commission. (Washington: Supt. Docs. 1942. Pp. 579. $1.50.)

Subsidy agreements: hearings, 77th Cong., 2nd sess., on H. R. 7105, to provide for the suspensions, during the war, of operating-differential subsidy agreements, and attendant benefits, under title 6 of the Merchant Marine act, 1936, as amended, and for other purposes, June 11, 1942. Merchant Marine and Fisheries Committee, House. (Washington: Supt. Docs. 1942. Pp. 35. 10c.)

Agriculture; Forestry; Fisheries

ARNDT, E. H. D. *An experiment in agricultural credit. The Union Agricultural Credit act, 1926.* Pub. of Univ. of Pretoria, ser. no. III: arts and soc. sci. no. 12. (Pretoria: J. H. de Bussy. 1942. Pp. 45. 2*s.*)

BAGLEY, W. C. *Soil exhaustion and the Civil War.* (Washington: Am. Council on Public Affairs. 1942. Pp. 112. $2.)

BEAN, L. H. *Crop yields and weather.* U. S. Dept. of Agric. misc. pub. no. 471. (Washington: Supt. of Docs. 1942. Pp. 134. 40c.)

DAVIS, J. S. *World wheat survey and outlook, May 1942.* Wheat stud., vol. XVIII, no. 8. (Palo Alto: Stanford University. 1942. Pp. 27. 75c.)

GEE, W. *The social economics of agriculture.* Rev. ed. (New York: Macmillan. 1942. Pp. xii, 720. $4.)

HOPKINS, J. A. *Farm records.* (Ames: Iowa State Coll. Press. 1942. Pp. xiii, 258. $2.75.)

HOSMER, J. B. and STRICKLAND, M. A. *Wool industry prospectus.* State eng. exp. sta. bull. no. 7. (Atlanta: Georgia School of Technology. 1941. Pp. 56. 75c.)

ROCHESTER, A. *Lenin on the agrarian question.* (New York: Internat. Pub. 1942. Pp. 224. $2.50.)

WALWORTH, G. *Feeding the nation in peace and war.* (New York: Norton. 1942. Pp. 548. $5.)

A critical survey of the machinery for the production and marketing of Great Britain's food supplies.

WILLKIE, H. F. and KOLACHOV, P. J. *Food for thought.* (Indianapolis: Indiana Farm Bureau. 1942. Pp. 209. $2.)

"A treatise on the utilization of farm products for producing farm motor fuel as a means of solving the Agricultural Problem."

Agricultural appropriation: hearings, 77th Cong., 2nd sess., on H. R. 6709, making appropriations for the Department of Agriculture for the fiscal year ending June 30, 1943, and for other purposes. Appropriations Committee, Senate. (Washington: Supt. Docs. 1942. Pp. 1146. $1.25.)

Farm parity prices and the war. Farmer and the war. (Washington: Supt. Docs. 1942. Pp. 8. 5c.)

Liebig and after Liebig; a century of progress in agricultural chemistry. (Washington: Am. Assoc. for Advancement of Sci. 1942. Pp. 119. $3.)

Parity loans: hearings, 77th Cong., 2nd sess., on H. R. 7222, to provide that loans on the 1942-1946 crops of corn, wheat, rice, cotton, tobacco, and peanuts shall be made at a rate equal to the parity price (S. 2585 reported), July 9, 1942. Agriculture Committee, House. (Washington: Supt. Docs. 1942. Pp. 23. 10c.)

Selected list of American agricultural books. Lib. list no. 1. (Washington: U. S. Dept. of Agric. Lib. 1942. Pp. 29.)

Selected problems in the law of water rights in the West. U. S. Dept. of Agric., misc. pub. 418. (Washington: Supt. Docs. 1942. Pp. 513. $1.)

Wool: hearings, 77th Cong., 2nd sess., pursuant to S. Res. 160 (74th Congress) and S. Res. 278 (75th Congress), providing for an investigation of the production, transportation, and marketing of wool. Part 3. *July, 1942.* Special Committee to Investigate the Production, Transportation, and Marketing of Wool. (Washington: Supt. Docs. 1942. Pp. 112. 15c.)

Economic Geography; Regional Planning; Urban Land; Housing

BLANCHARD, W. O. *Exercises in economic geography.* 3rd ed. (New York: McGraw-Hill. 1942. Pp. ix, 64. $1.)

COLEAN, W. L. *The rôle of the housebuilding industry.* (Washington: Nat. Resources Planning Board. 1942. Pp. 29.)

ROBINSON, M. V. *Recreation and housing for women war workers; a handbook on standards.* U. S. Dept. of Labor, Women's Bur. bull. no. 190. (Washington: Supt. Docs. 1942. Pp. v, 40. 10c.)

SCHAFFTER, D. *State housing agencies.* (New York: Columbia Univ. Press. 1942. Pp. 821. $7.50.)

SMITH, J. R. *Other world neighbors; the British Empire, Africa, Asia, Latin America, the polar regions.* Rev. and enl. ed. (Philadelphia: Winston. 1942. Pp. 340. $1.44.)

ZARA, L. *This land is ours.* (Garden City: Sun Dial Press. 1940. Pp. 778. $1.)

Economic atlas of the Pacific Northwest. (Portland, Ore.: Northwest Regional Council. 1942. Pp. 17. 75c.)

Housing, national defense: supplemental hearings, 77th Cong., 2nd sess., on H. R. 6483, to amend the act entitled "An act to expedite the provision of housing in connection with national defense, and for other purposes," approved Oct. 14, 1940, as amended; March, 1942. Public Buildings and Grounds Committee, House. (Washington: Supt. Docs. 1942. Pp. 184. 20c.)

Rand McNally geographical handbook; a keyed index of the United States. (Chicago: Rand McNally. 1942. Pp. 128. $2.50.)

United States Housing Authority: annual report (non-defense activities) for the fiscal year 1941. Federal Public Housing Authority. (Washington: Supt. Docs. 1942. Pp. 145. 25c.)

When we build again. (London: Allen and Unwin. New York: Norton. 1942. $3.)

This book is the result of three years' objective research carried out by the Bournville Village Trust into conditions of living and working in Birmingham.

Labor and Industrial Relations

ALLEN, R. A. *Chapters in the history of organized labor in Texas.* Pub. no. 4143. (Austin: Univ. of Texas. 1941. Pp. 258.)

———. *The great Southwest strike.* Pub. no. 4214. (Austin: Univ. of Texas. 1942. Pp. 174.)

BAKER, H. *Women in war industries.* Research rept. ser., no. 66. (Princeton: Industrial Rel. Sec., Princeton Univ. 1942. Pp. 82. $1.50.)

BAKER, H. B. *Mediation and arbitration of labor disputes, by state agency in Indiana.* (Indianapolis: Department of Journalism, Butler Univ. 1942. Pp. v, 58.)

BARNES, R. M. *Motion and time study applications.* (New York: Wiley. Pp. 188. $1.75.)

BARRETT, T. *Your job and American victory.* (New York: George W. Stewart. 1942. Pp. 315. $2.50.)

BESHOAR, B. B. *Out of the depths; the story of John R. Lawson, a labor leader.* (Denver: Denver Trades and Labor Assembly. 1942. Pp. 392. $3.)

BOWMAN, D. O. *Public control of labor relations; a study of the National Labor Relations Board.* (New York: Macmillan. 1942. Pp. xi, 504. $5.)

BURTT, H. E. *Principles of employment psychology.* Rev. ed. (New York: Harper. 1942. Pp. 580. $4.50.)

CHERNICK, J. *Economic effects of steady employment and earnings.* (Minneapolis: Univ. of Minnesota Press. 1942. Pp. v, 75. $1.25.)

"A case study of the annual wage system of Geo. A. Hormel & Co."

DAUGHERTY, C. R. *Labor problems in American industry.* 5th ed. (New York: Houghton Mifflin. 1941. $3.75.)

DJANG, T. K. *Factory inspection in Great Britain.* (London: Allen and Unwin. New York: Norton. 1942. $4.)

FOSTER, W. Z. *The trade unions and the war.* (New York: Internat. Pubs. 1942. Pp. 46. 5c.)

FRYKLUND, V. C. *Trade and job analysis.* (Milwaukee: Bruce. 1942. Pp. 167. $1.75.)

HEYEL, C. *How to create job enthusiasm.* (New York: McGraw-Hill. 1942. Pp. 248. $2.)

HILL, S. E. *Teamsters and transportation; employee-employer relationships in New England.* Stud. in lab. (Washington: Am. Council on Public Affairs. 1942. Pp. 248. $3.75.)

JOHNSEN, J. E., compiler. *The closed shop.* Ref. shelf, vol. 15, no. 7. (New York: H. W. Wilson. 1942. Pp. 263. $1.25.)

MCAVOY, C. T. *The trade unions of our Soviet ally.* (New York: Am. Council on Soviet Relations. 1942. Pp. 32. 5c.)

METZ, H. W. *Is there enough manpower?* Pamph. no. 45. (Washington: Brookings Inst. 1942. Pp. 25. 25c.)

MILLIS, H. A., and others. *How collective bargaining works; a survey of experience in leading American industries.* (New York: Twentieth Century Fund. 1942. Pp. xxviii, 986. $4.)

PALMER, G. L. and COHN, S. M. *War labor supply problems of Philadelphia and its environs.* Research rept. no. 5. (Philadelphia: Industrial Research Dept., Wharton School of Finance and Commerce, Univ. of Pennsylvania. 1942. Pp. vii, 54.)

REED, G. L. *Law of labor relations.* (Newark: Soney and Sage. 1942. Pp. 457. $7.50.)

RIEGEL, J. W. *Management, labor and technological change.* Michigan repts. of the Bur. of Industrial Rel., no. 3. (Ann Arbor: Univ. of Michigan Press. 1942. Pp. vii, 187. $2.50.)

STERNBERG, F. *German man power: the crucial factor*. Pamph. no. 36. (Washington: Brookings Inst. Pp. 51. 25c.)

STIGERS, M. F. and REED, E. G. *The theory and practice of job rating*. (New York: McGraw-Hill. Pp. 163. $1.75.)

SUPER, D. E. *The dynamics of vocational adjustment*. (New York: Harper. Pp. 299. $3.)

TIFFIN, J. *Industrial psychology*. (New York: Prentice-Hall. 1942. Pp. 402. $4.65; school edition, $3.50.)

TONER, J. L. *The closed shop*. (Washington: Am. Council on Public Affairs. 1942. Pp. 213. $3.25; paper, $2.75.)

HORST, S. T. VAN DER. *Native labour in South Africa*. (New York: Oxford Univ. Press. Pp. xii, 340. $6.)

YODER, D. *Personnel management and industrial relations*. New ed. (New York: Prentice-Hall. 1942. Pp. 870. $5.65; school edition, $4.25.)

A revision and enlargement of *Personnel and Labor Relations*.

Changes in distribution of manufacturing wage earners, 1899-1939. Census Bureau. (Washington: Supt. Docs. 1942. Pp. 268. 30c.)

Employee thrift plans in wartime. Stud. in personnel pol., no. 42. (New York: Nat. Industrial Conf. Board. (1942. Pp. 40.)

Handbook of labor statistics, 1941 edition, in 2 volumes. Vol. 1. *All topics except wages;* Vol. 2. *Wages and wage regulation*. Bur. of lab. stat., bull. 694. (Washington: Supt. Docs. 1942. Pp. 1042; 426. $1; 45c.)

Industrial-injury statistics by states. Bur. of lab. stat., bull. 700. (Washington: Supt. Docs. 1942. Pp. 67. 15c.)

The purpose of this bulletin is to present in convenient form injury rates by industry and State, as well as for the country as a whole.

The international seamen's code. Conventions and recommendations affecting maritime employment adopted by the International Labour Conference, 1920-1936. (Montreal: Internat. Labour Office. 1942. Pp. 56. 25c.)

Labor department: hearings, 77th Cong., 2nd sess., on the Department of Labor, Federal Security Agency appropriation bill for 1943. Part 1. *Department of Labor, Employees' Compensation Commission, National Labor Relations Board, National Mediation Board, Railroad Retirement Board*. Part 2. *Federal Security Agency*. Part 3. *Supplemental hearing: Federal Security Agency; Office of Education—student loans; Public Health Service—training of nurses, training in industry, Freedmen's Hospital; General Accounting Office report; Department of Labor, Bureau of Labor Statistics*. H. Doc. No. 745, Employees' Compensation. Appropriations Committee, House. (Washington: Supt. Docs. 1942. Pp. 635; 1264; 105. 70c; $1.50; 15c.)

Labor organizations: hearings, 77th Cong., 2nd sess., on H. R. 6444, to provide for the registration of labor organizations, business and trade associations, and so forth, March, 1942. Judiciary Committee, House. (Washington: Supt. Docs. 1942. Pp. 111. 15c.)

Occupations suitable for women. U. S. Employment Service. (Washington: Supt. Docs. 1942. 35c.)

The result of a detailed study of 1,859 different jobs required in 21 key war industries and 937 nonwar jobs, to determine those in which women may be successfully employed.

Southern labor in wartime. (New York: Internat. Pubs. 1942. Pp. 31. 5c.)

Social Insurance; Relief; Pensions; Public Welfare

PARKER, J. S. *Social security reserves*. (Washington: Am. Council on Public Affairs. 1942. Pp. 340. $3.50.)

Pérez, M. A. *Living conditions among small farmers in Puerto Rico.* Research bull. on agric. and livestock no. 2. Dept. of Agric. and Comm., Puerto Rico. (San Juan: Bur. Supplies, Printing and Transportation. 1942. Pp. 98.)

Wilcox, J. K. *Unemployment relief documents: guide to publications and releases of F.E.R.A. and state relief agencies.* (New York: H. W. Wilson. 1936. Pp. 95. 50c.)
A comprehensive list of all official publications and releases.

Family allowances: hearings, 77th Cong., 2nd sess., on S. 2467, to provide family allowances for the dependents of enlisted men of the Army, Navy, Marine Corps, and Coast Guard of the United States, and for other purposes, Apr. 29, 1942. Military Affairs Committee, Senate. (Washington: Supt. Docs. 1942. Pp. 70. 10c.)

Relief: hearings, 77th Cong., 2nd sess., on appropriations for work relief, fiscal year 1943. Appropriations Committee, House. (Washington: Supt. Docs. 1942. Pp. 224. 25c.)

Some basic readings in social security. Soc. Security Board, pub. 28. (Washington: Supt. Docs. 1942. Pp. 74. 15c.)

Towards our true inheritance, the reconstruction work of I. L. O. (Montreal: Internat. Labour Office. 1942. Pp. ii, 77. 25c.)

Consumption; Income Distribution; Coöperation

Andres, E. M. and Cocanower, C. D. *Economics and the consumer.* (Boston: Houghton Mifflin. 1942. Pp. 566. $3.50.)

Creedy, B. S. *Consumer problems and projects.* (New York: Womans Press. 1942. Pp. 72. 25c.)

Gamble, M. T. and Porter, M. C. *Your food dollar; how to spend it wisely.* Tower books. (Cleveland: World Pub. Co. 1942. Pp. 279. 49c.)

Kuznets, S. S. *Uses of national income in peace and war.* Occasional paper no. 6. (New York: Nat. Bur. of Econ. Research. 1942. Pp. 42. 25c.)

Margolius, S. *How to buy more for your money.* (New York: Modern Age Books. 1942. Pp. 80. $1.)

Tereshtenko, V. J. *The problem of coöperative medicine.* Coöp. project stud.; ser. B, stud. in field of coöp. medicine, pt. 1. (Boston: Edward A. Filene Good Will Fund. 1942. Pp. 79. 35c.)

Warbasse, J. P. *Coöperative democracy, through voluntary association of the people as consumers.* 4th ed. (New York: Harper. 1942. Pp. 298. $2.50.)

Delaware income statistics. Compiled from income tax returns for 1936, 1937, and 1938. Vol. I. (Newark: Bur. of Econ. and Bus. Research, Univ. of Delaware. 1941. Pp. xliii, 197.)

Family income and expenditures, Southeast region. Part 1. *Family income.* U. S. Dept. of Agric., misc. pub. 462. (Washington: Supt. Docs. 1942. Pp. 208. 25c.)

Family expenditures for education, reading, recreation and tobacco, 5 regions. U. S. Dept. of Agric., misc. pub. 456. (Washington: Supt. Docs. 1942. Pp. 208. 25c.)

Family spending and saving, as related to age of wife and age and number of children. U. S. Dept. of Agric., misc. pub. 489. (Washington: Supt. Docs. 1942. Pp. 126. 25c.)

Low-priced milk and the consumption of dairy products among low-income families, Washington, D.C., 1940. U. S. Dept. of Agric., cir. 645. (Washington: Supt. Docs. 1942. Pp. 28. 10c.)

Minnesota incomes, 1938-39; a report of the distribution of family and individual incomes. Prepared by the Minnesota Income Study under supervision of William Weinfeld. Vol.

I. *General economic unit data: field survey*. Vol. II. *Detailed economic unit data: field survey*. Vol. III. *Individual earners: field survey; covered individuals: unemployment compensation data; state individual income tax returns*. Vol. IV. *Minneapolis-St. Paul data*. Official project of Work Projects Admin. (St. Paul: Minnesota Resources Commission, State Capitol. 1942. Pp. lxviii, 190; lxviii, 369; xci, 336; lxvii, 56.)

Statistics of income for 1940. Part 1. *Preliminary report of individual income and defense tax returns and taxable fiduciary income and defense tax returns filed in period January through June 1941*. Internal Revenue Bur. (Washington: Supt. Docs. 1942. Pp. 32. 10c.).

Population; Migration; Vital Statistics

Hrdlicka, A. *The peoples of the Soviet Union*. War background stud., no. 3. (Washington: Smithsonian Inst. 1942. Pp. 29.)

Kerr, C. *Migration to the Seattle labor market area, 1940-42*. (Seattle: Univ. of Washington Press. Pp. v, 60. 75c.)

Lasker, B. *Populations adrift*. Educ. and nat. defense ser. (Washington: Supt. Docs. Pp. 35. 15c.)

Malcolm, R. *The Japanese problem in California*. (Los Angeles: Author, 3551 University Ave. 1942.)

Vishniak, M. *The transfer of populations, as a means of solving the problem of minorities*. (In Yiddish.) (New York: Yiddish Scientific Inst., 425 Lafayette St. Pp. 94. 75c.)

National defense migration: hearings, 77th Cong., 2nd sess., pursuant to H. Res. 113, resolution to inquire into interstate migration of citizens, emphasizing the present and potential consequences of the migration caused by the national defense program. Part 31. *Los Angeles and San Francisco hearings, March, 1942. Problems of evacuation of enemy aliens and others from prohibited military zones*. Part 32. *Huntsville hearings, May, 1942*. Select Committee Investigating National Defense Migration, House. (Washington: Supt. Docs. 1942. Pp. 322; 465. 35c; 55c.)

Refugee settlement in the Dominican Republic: a survey conducted under the auspices of The Brookings Institution. (Washington: Brookings Inst. 1942. Pp. xvi, 410. $4.)

Unclassified Items

Brown, F. *War atlas; a handbook of maps and facts;* maps by Emil Herlin. 3rd ed. Headline books, no. 23. (New York: Foreign Policy Assoc. 1942. Pp. 92. 25c.)

Brown, P. M. *The science of peace*. (New York: Revell. 1942. Pp. 63. 75c.)
The author believes that a successful peace must begin at home, in industry and among classes with as careful planning as any military strategy.

Butler, H. B. *The lost peace; a personal impression*. (New York: Harcourt. 1942. Pp. 258. $2.75.)
The author was deputy director and then director of the International Labor Office of the League of Nations from 1920 to 1938.

Clement, J. A. *Manual for analyzing and selecting textbooks*. (Champaign, Ill.: Garrard Press. 1942. Pp. 125. $2.)

Finney, G. J. *Books on Latin American history; a study of collections available in colleges and universities of the United States*. Stud. of the A.L.A. com. on lib. coöp. with Latin America, no. 3. (Chicago: Am. Lib. Assoc. Pp. 51. 75c.)

Grismer, R. L. *A reference index to 12,000 Spanish American authors*. (New York: H. W. Wilson Co. Pp. 150. $4.50.)

Hoover, H. C. and Gibson, H. *The problems of lasting peace*. (Garden City: Doubleday. Pp. 303. $2.)

HUMPHREYS, R. A., compiler. *Latin America, a bibliography.* New York: Oxford. Pp. 36. 50c.)

KRAUS, R. *Europe in revolt.* (New York: Macmillan. Pp. 573. $3.50.)
A picture of the underground war against Hitler and his New Order.

WILGUS, A. C. *Histories and historians of Hispanic America.* 2nd and rev. ed. (New York: H. W. Wilson Co. Pp. 150. $1.75.)

WHITAKER, J., compiler. *An almanack for the year of our Lord 1942.* (New York: Internat News. 1942. Pp. 1052. $2.75.)
"Contains a vast amount of information respecting the government, finances, population, commerce, and general statistics of the various nations of the world with an index containing 35,000 references."

American year book, 1941, The. (New York: Nelson. 1942. Pp. 1054. $8.50.)

Fabian Society: 59th annual report for the year ending 31 March, 1942. (London: Fabian Society. 1942. Pp. 22.)

Numerical lists and schedule of volumes of the reports and documents of the 77th Congress, 1st session, January 3, 1941-January 2, 1942. (Washington: Supt. Docs. 1942. Pp. 80. 15c.)

Proceedings, seventh annual economic conference, Rollins College. Held February 2-4, 1942, at Winter Park, Florida. (Winter Park, Fla.: Rollins College. 1942. Pp. ii, 153.)

PERIODICALS

Economic Theory; General Works

ADORNO, T. W. *Veblen's attack on culture.* Stud. in Phil. and Soc. Sci., Vol. 9, no. 3, 1941. Pp. 25.

BAIN, J. S. *Market classifications in modern price theory.* Quart. Jour. Econ., Aug., 1942. Pp. 15.

BUCHANAN, N. S. *Advertising expenditures: a suggested treatment.* Jour. Pol. Econ., Aug., 1942. Pp. 22.

HAGEN, E. E. *Saving, investment, and technological unemployment.* Am. Econ. Rev., Sept., 1942. Pp. 3.

ENKE, S. *Space and value.* Quart. Jour. Econ., Aug., 1942. Pp. 11.

FETTER, F. W. *The life and writings of John Wheatley.* Jour. Pol. Econ., June, 1942. Pp. 20.

GUNN, G. T. and DOUGLAS, P. H. *The production function for American manufacturing for 1914.* Jour. Pol. Econ., Aug., 1942. Pp. 8.

HAYEK, F. A. v. *The Ricardo effect.* Economica, May, 1942. Pp. 26.

HERZOG, J. S. *Un gran Utopista Frances.* Investigacion Econ., Vol. 2, no. 2, 1942. Pp. 11.

HICKS, J. R. *Consumers' surplus and index numbers.* Rev. Econ. Stud., Summer, 1942. Pp. 12.

HORNEDO, E. *Tiene razon Keynes?* El Trimestre Econ., July-Sept., 1942. Pp. 12.

JOHNSON, A. *Arthur Feiler, 1879-1942.* Soc. Research, Sept., 1942. Pp. 2.

KALECKI, M. *A theory of profits.* Econ. Jour., June-Sept., 1942. Pp. 10.

KAUFMANN, F. *One of the postulates of economic theory.* Soc. Research, Sept., 1942. Pp. 17.

KRISHNASWAMI, A. *Marshall's contribution to Indian economics.* Indian Jour. Econ., April, 1942. Pp. 23.

KYBAL, M. *La teoria del valor de Karel Englis.* El Trimestre Econ., July-Sept., 1942. Pp. 20.

LEAVELLE, A. B. *James Wilson and the relation of the Scottish metaphysics to American political thought.* Pol. Sci. Quart., Sept., 1942. Pp. 17.

MACHLUP, F. *Competition, pliopoly and profit.* III. Economica, May, 1942. Pp. 21.

MARQUEZ, J. *Alberto Struzzi.* Investigacion Econ., Vol. 2, no. 2, 1942. Pp. 20.

NEISSER, H. *The concept of technological unemployment: a reply to Mr. Hagen's criticism.* Am. Econ. Rev., Sept., 1942. Pp. 2.

NÚNEZ, L. M. y. *Programa para la integracion de las investigaciones sociales en las Americas.* Rev. Mexicana de Soc., Primer Trimestre, 1942. Pp. 14.

PIGOU, A. C. *Models of short-period equilibrium.* Econ. Jour., June-Sept., 1942. Pp. 8.

QADIR, M. A. *The economic ideas of Ibn-Khaldun.* Indian Jour. Econ., April, 1942. Pp. 10.

ROOS, C. F. and SZELISKI, V. v. *The determination of interest rates.* Jour. Pol. Econ., Aug., 1942. Pp. 36.

SHACKLE, G. L. S. *A theory of investment-decisions.* Oxford Econ. Papers, April, 1942. Pp. 18.

SRAFFA, P. *Las leyes de los rendimentos en condiciones de competencia.* El Trimestre Econ., July-Sept., 1942. Pp. 22.

VITERBO, C. *Teoria económica del Seguro a prima fija.* Rev. de Econ. y Estat., No. 4, 1941. Pp. 25.

WEINTRAUB, S. *The foundations of the demand curve.* Am. Econ. Rev., Sept., 1942. Pp. 15.

———. *Monopoly equilibrium and anticipated demand.* Jour. Pol. Econ., June, 1942. Pp. 8.

——— and TRIFFIN, R. *The classification of market positions: comment and reply.* Quart. Jour. Econ., Aug., 1942. Pp. 12.

Maintaining capital intact: a further suggestion. Economica, May, 1942. Pp. 6.

Economic History

COPE, S. R. *The goldsmids and the development of the London money market during the Napoleonic wars.* Economica, May, 1942. Pp. 27.

GATES, P. W. *The rôle of the land speculator in Western development.* Penn. Mag. of Hist. and Biog., July, 1942. Pp. 20.

HEATON, H. *Recent developments in economic history.* Am. Hist. Rev., July, 1942. Pp. 20.

JACKSON, S. L. *Labor, education, and politics in the 1830's.* Penn. Mag. of Hist. and Biog., July, 1942. Pp. 15.

JASNY, N. *Competition among grains in classical antiquity.* Am. Hist. Rev., July, 1942. Pp. 18.

KAHN, E. *The study of economic history in South Africa, and the concept of the "frontier spirit."* So. African Jour. Econ. March, 1942. Pp. 11.

KIRCHBERGER, H. *An ancient experience with price control.* Jour. Farm Econ., Aug., 1942. Pp. 16.

KITTEL, VON. *Aktenstücke zur vorgeschichte der Reichsbahn.* Archiv f. Eisenbahnw., Sept.-Oct., 1941. Pp. 40.

MIMBELA, C. C. *Historia del Presupuesto Nacional desde 1821 a 1899.* Rev. de la Facultad de Ciencias Econ., April, 1942. Pp. 50.

Economic Systems; National Economies

BRADY, A. *Reconstruction in Canada: a note on policies and plans.* Canadian Jour. Econ. and Pol. Sci., Aug., 1942. Pp. 9.

CAMPBELL, J. C. *Nationalism and regionalism in South America.* Foreign Affairs, Oct., 1942. Pp. 17.

DEAN, V. M. *Germany in post-war reconstruction.* Yale Rev., Autumn, 1942. Pp. 17.

DUFFETT, W. E. *The Indian economy and the present war.* Canadian Banker, July, 1942. Pp. 12.

EINZIG, P. *A plan for Germany's economic disarmament.* Econ. Jour., June-Sept., 1942. Pp. 10.

FIRTH, G. G. *Article seven—a programme for prosperity.* Econ. Record, June, 1942. Pp. 15.

GLENDAY, R. G. *Economic reconstruction after the war.* Jour. Royal Stat. Soc., Vol. 105, pt. 1, 1942. Pp. 19.

KIRCHHEIMER, O. *The legal order of national socialism.* Stud. in Phil. and Soc. Sci., Vol. 9, no. 3, 1941. Pp. 20.

KLEFFENS, E. N. van. *The democratic future of the Netherlands Indies.* Foreign Affairs, Oct., 1942. Pp. 16.

LABOUGLE, A. *Situación en Argentina en el ano 1942.* Rev. de Ciencias Econ., April, 1942. Pp. 25.

MOSKOWITZ, M. *Three years of the protectorate of Bohemia and Moravia.* Pol. Sci. Quart., Sept., 1942. Pp. 23.

OSHIMA, H. T. *Japan's "new economic structure."* Pacific Affairs, Sept., 1942. Pp. 19.

POLLOCK, F. *Is national socialism a new order?* Stud. in Phil. and Soc. Sci., Vol. 9, no. 3, 1941. Pp. 16.

RICHARDS, C. S. *Fundamentals of economic policy in the Union.* So. African Jour. Econ., March, 1942. Pp. 26.

SINGER, H. W. *The German war economy. VI.* Econ. Jour., June-Sept., 1942. Pp. 20.

SCOTT, F. R. *Political nationalism and confederation.* Canadian Jour. Econ. and Pol. Sci., Aug., 1942. Pp. 30.

TAMAGNA, F. M. *Financial problems in China's war and postwar economy.* Pacific Affairs, Sept., 1942. Pp. 20.

WILSON, J. S. G. *Further developments in Australia's war economy.* Econ. Record, June, 1942. Pp. 15.

YUNG-YING, H. *Dimensions of China's unity.* Pacific Affairs, Sept., 1942. Pp. 24.

Den økonomiske Udvikling i Denmark. Økonomi og Politik, July-Sept., 1941. Pp. 10.

Social reconstruction in China: a study in post-war problems. Internat. Lab. Rev., Sept., 1942. Pp. 14.

Wirtschaft und verkehr in der Ukraine. Archiv f. Eisenbahnw., Sept.-Oct., 1941. Pp. 11.

Statistics; Economic Mathematics; Accounting

BERKSON, J. *Tests of significance considered as evidence.* Jour. Am. Stat. Assoc., Sept., 1942. Pp. 11.

BERNÓS, L. *Organizacion de la contabilidad agricola.* Rev. de la Facultad de Ciencias Econ., April, 1942. Pp. 50.

BROSTER, E. J. *Correlation analysis by margins.* Jour. Am. Stat. Assoc., Sept., 1942. Pp. 8.

EVANS, W. D. *The standard error of percentiles.* Jour. Am. Stat. Assoc., Sept., 1942. Pp. 10.

MERWIN, C. L. *National income. What it is; how it is measured.* Dun's Rev., Aug., 1942. Pp. 6.

NICHOLS, C. K. *The statistical work of the League of Nations in economic, financial and related fields.* Jour. Am. Stat. Assoc., Sept., 1942. Pp. 7.

SHANAS, E. *A critique of Dodd's* Dimensions of Society. Am. Jour. Soc., Sept., 1942. Pp. 17.

SILVA, B. *Métodos de estimativa das rendas públicas.* Rev. Serv. Pub., April, 1942. Pp. 4.

STONE, R., MEADE, J. E., and CHAMPERNOWNE, D. G. *The precision of national income estimates.* Rev. Econ. Stud., Summer, 1942. Pp. 15.

TAGGART, H. F. *Accounting aspects of price administration.* Jour. Accountancy, July, 1942. Pp. 7.

THOMPSON, M. F. *Cost estimating for government contracts.* N.A.C.A. Bull., July 1, 1942. Pp. 14.

THOMPSON, R. J. *Some suggestions in regard to our agricultural statistics.* Jour. Royal Stat. Soc., Vol. 105, pt. 1, 1942. Pp. 6.

WILCOXEN, L. C. *The market forecasting significance of market movements.* Jour. Am. Stat. Assoc., Sept., 1942. Pp. 9.

WRIGHT, D. M. *The interpretation of the Kuznets-Fabricant figures for "net" capital consumption.* Jour. Pol. Econ., June, 1942. Pp. 9.

Accounting aspects of T.N.E.C. monographs nos. 3, 9 and 20. Jour. Accountancy, July, 1942. Pp. 9.

Accounting for materials and related procedures. N.A.C.A. Bull., Aug. 15, 1942. Pp. 24.

Auditing under wartime conditions. A joint report of the committee on auditing procedure of the American Institute of Accountants and the committee on practice procedure of the New York State Society of Certified Public Accountants. Jour. Accountancy, Aug., 1942. Pp. 12.

Current practice in accounting for special war reserves by the Research Department of American Institute of Accountants. Jour. Accountancy, Aug., 1942. Pp. 12.

Business Cycles and Fluctuations

ABRAMOVITZ, M. *Savings and investment: profits vs. prosperity?* Am. Econ. Rev., Suppl., June, 1942. Pp. 36.

BREMS, H. *Wicksells tre definitioner af ligevaegtsrenten*. Nationaløk. Tids., 1941. 4 Hefte, 1941. Pp. 30.

COPELAND, M. A. *The defense effort and the national income response pattern*. Jour. Pol. Econ., June, 1942. Pp. 12.

FURTH, J. H. *Earnings and employment in the business cycle*. Rev. Econ. Stat., Aug., 1942. Pp. 7.

HAHN, L. A. and SOUDEK, J. *German experience with stocks and inflation*. Bankers Mag., July, 1942. Pp. 9.

HART, A. G. *What it takes to block inflation*. Rev. Econ. Stat., Aug., 1942. Pp. 13.

PAYNE, W. F. *Business behavior, 1919-1922; an account of postwar inflation and depression*. Jour. Bus., Univ. Chicago, July and Oct., 1942. Pp. 215.

SCHNEIDER, E. E. *Kapitalbehov, kapitaldaekning og likviditet I handelsog industrivirksomheder*. Nationaløk. Tids., 4 Hefte, 1941. Pp. 16.

SHISHKIN, B. *Wages and inflation*. Am. Fed., Aug., 1942. Pp. 4.

STONE, R. *The national income output and expenditure of U.S.A., 1929-41*. Econ. Jour., June-Sept., 1942. Pp. 22.

Public Finance; Fiscal Policy; Taxation

BENHAM, F. *What is the best tax-system?* Economica, May, 1942. Pp. 12.

BRADLEY, P. D. *The direct effects of a corporate income tax*. Quart. Jour. Econ., Aug., 1942. Pp. 17.

HARGREAVES, H. W. *The guaranteed security in federal finance*. Jour. Pol. Econ., Aug., 1942. Pp. 20.

KALDOR, N. *The income burden of capital taxes*. Rev. Econ. Stud., Summer, 1942. Pp. 20.

———. *The 1941 white paper on national income and expenditure*. Econ. Jour., June-Sept., 1942. Pp. 17.

LUDMER, A. H. *American and German taxation*. Bull. Nat. Tax Assoc., June, 1942. Pp. 5.

MACKINTOSH, W. A. *Canadian war financing*. Jour. Pol. Econ., Aug., 1942. Pp. 20.

MALHOTRA, D. K. *Finance of local bodies in the Punjab*. Indian Jour. Econ., April, 1942. Pp. 13.

MARTIN, J. W. *Implications of state and federal aid to municipalities*. Municipal Finance, May, 1942. Pp. 7.

PHILIP, K. *Hvori bestaar skattebyrden*. Nationaløk. Tids., 4 Hefte, 1941. Pp. 10.

RATCHFORD, B. U. *The burden of a domestic debt*. Am. Econ. Rev., Sept., 1942. Pp. 17.

SAMUELSON, P. A. *Fiscal policy and income determination*. Quart. Jour. Econ., Aug., 1942. Pp. 31.

SIMKIN, C. G. F. *Budgetary reform in New Zealand*. Econ. Record, June, 1942. Pp. 15.

SOMERS, H. M. *The impact of fiscal policy on national income*. Canadian Jour. Econ. and Pol. Sci., Aug., 1942. Pp. 22.

TREVISAN, E. C. *Estudios sobre la ley argentina de impuesto a los réditos*. Rev. de Ciencias Econ., March, 1942. Pp. 8.

VIANA, A. DE. *Especializacao ou discriminacao da despesa*. Rev. Serv. Pub., April, 1942. Pp. 5.

WARD, R. L. *The taxation of land values in the Transvaal by local authorities*. So. African Jour. Econ., March, 1942. Pp. 20.

Algunos casos de aplicación de impuestos, Guillermo Ureta del Solar. Rev. de la Facultad de Ciencias Econ., April, 1942. Pp. 14.

Constitutionality of state law apportioning incidence of federal state tax. Yale Law Jour., May, 1942. Pp. 7.

Recommendations for new tax legislation. Statement by Committee on Federal Taxation, American Institute of Accountants. Jour. Accountancy, Sept., 1942. Pp. 8.

Removal of due process prohibitions against multiple state inheritance taxation of intangibles. Yale Law Jour., June, 1942. Pp. 9.

Money and Banking; Short-Term Credit

BEALE, W. T. M., JR., KENNEDY, M. T. and WINN, W. J. *Commodity reserve currency: a critique.* Jour. Pol. Econ., Aug., 1942. Pp. 16.

BINNEY, R. M. *Some war experiences of the British banks.* Bankers Mag., 1942. Pp. 8.

ELÍA, O. H. *Nuestro primer banco.* Rev. de Ciencias Econ., April, 1942. Pp. 8.

FETTER, F. W. *The bullion report reëxamined.* Quart. Jour. Econ., Aug., 1942. Pp. 11.

FOULKE, R. A. *Evolution of financing institutions from 1841.* Dun's Rev., June, 1942. Pp. 8.

MASSIE, A. M. *Commercial banks and the war finance program.* Bankers Mag., July, 1942. Pp. 7.

MICHELL, H. *Monetary reconstruction. The presidential address delivered at the Annual Meeting of the Canadian Political Science Association, May 25, 1942.* Canadian Jour. Econ. and Pol. Sci., Aug., 1942. Pp. 12.

RAPP, R. E. *The Hamilton National Associates, Inc.—A case study in group banking.* I. So. Econ. Jour., July, 1942. Pp. 14.

SAMPAIO, A. *El sistema monetario Brasileno.* Rev. de Econ. y Estad., No. 4, 1941. Pp. 49.

TREFFTZS, K. L. *An investment policy for commercial banks.* Bankers Mag., July, 1942. Pp. 4.

——. *The regulation of loans to executive officers of commercial banks.* Jour. Pol. Econ., June, 1942. Pp. 20.

TUCKER, D. S. *Capital money and revenue funds.* Am. Econ. Rev., Sept., 1942. Pp. 18.

WELLER, G. A. *Control of banking in war-time.* Econ. Record, June, 1942. Pp. 7.

Annual report of the central bank of the Argentine Republic. Fed. Res. Bull., Sept., 1942. Pp. 18.

Bank credit, war finance, and savings. Fed. Res. Bull., Sept., 1942. Pp. 8.

The Bank of England in war times. Bankers' Insur. Manag. and Agents' Mag., July, 1942. Pp. 6.

Banks in the war. Banking, July, 1942. Pp. 24.

Precio medio de la habitación ofrecida en la ciudad de Buenos Aires (1939-1941). Rev. de Econ. y Estat., No. 4, 1941. Pp. 12.

The progress of banking in Great Britain and Ireland during 1941. Bankers' Insur. Manag. and Agents' Mag., Part 1, June, 1942, pp. 10; Part 2, Aug., 1942. Pp. 10.

Regional distribution of commercial loans. Fed. Res. Bull., Sept., 1942. Pp. 9.

International Trade, Finance and Economic Policy

BONNELL, A. T. *The post-war international economic order.* So. Econ. Jour., July, 1942. Pp. 7.

BROWN, A. J. *Trade balances and exchange stability.* Oxford Econ. Papers, April, 1942. Pp. 19.

CHOW, S. R. *The Pacific after the war.* Foreign Affairs, Oct., 1942. Pp. 16.

CLAY, H. *The place of exports in British industry after the war.* Econ. Jour., June-Sept., 1942. Pp. 9.

GERLACH-NIELSEN, C. *Det franske kolonirige.* Økonomi og Politik, July-Sept., 1941. Pp. 11.

HAUSSMANN, F. *World oil control, past and future—an alternative to "international cartelization."* Soc. Research, Sept., 1942. Pp. 22.

METZLER, L. A. *The transfer problem reconsidered.* Jour. Pol. Econ., June, 1942. Pp. 18.

PEÑA, M. T. de la. *Los transportes ferrocarrileros y las tarifas.* Investigacion Econ., Vol. 2, no. 2, 1942. Pp. 13.

ROCKEFELLER, N. *Inter-American coöperation.* Am. Fed., July, 1942. Pp. 2.

SCITOVSKY, T. de. *A reconsideration of the theory of tariffs.* Rev. Econ. Stud., Summer, 1942. Pp. 22.

SERVÍN, A. *Cual debe ser la politica del gobierno Mexicano en materia de comercio exterior.* El Trimestre Econ., July-Sept., 1942. Pp. 22.

SILVA, J. *Privilgeios y funciones del Banco Central Interamericano.* El Trimestre Econ., July-Sept., 1942. Pp. 12.

SPYKMAN, N. J. *Frontiers, security, and international organization.* Geograph. Rev., July, 1942. Pp. 12.

WOOLBERT, R. G. *Recent books on international relations.* Foreign Affairs, Oct., 1942. Pp. 16.

New administrative definitions of "enemy" to supersede the trading with the enemy act. Yale Law Jour., June, 1942. Pp. 11.

The United States in a new world. II: *Pacific relations.* Supplement to Fortune, Aug., 1942. Pp. 33.

Business Finance; Insurance; Investments; Securities Markets

AXE, L. H. *Corporate proxies.* Michigan Law Rev., Aug., 1942. Pp. 28.

BOURNE, E. W. *Findings of "value" in railroad reorganizations.* Yale Law Jour., May, 1942. Pp. 36.

DOBLIN, E. *The German "profit stop" of 1941.* Soc. Research, Sept., 1942. Pp. 8.

SPAL, S. G. *The treatment of noncumulative preferred shareholders with regard to dividends.* Jour. Bus., Univ. Chicago, July, 1942. Pp. 18.

STEVENS, W. H. S. *Railroad reorganizations under the Bankruptcy act.* Jour. Bus., Univ. Chicago, July, 1942. Pp. 20.

WOOD, G. L. *Economic aspects of war damage compensation.* Econ. Record, June, 1942. Pp. 6.

War damage insurance. Yale Law Jour., May, 1942. Pp. 15.

Public Control of Business; Public Administration; National Defense and War

AIKENHEAD, J. T. E., and HEYWOOD, P. K. *Practical problems of the retail price ceiling.* I: *Problems of the administration.* II: *Problems of the retailers.* Canadian Jour. Econ. and Pol. Sci., Aug., 1942. Pp. 13.

ARIAS, J. C. R. *La contaduria general de la nación como tribunal de cuentas.* Rev. de Ciencias Econ., April, 1942. Pp. 12.

BACKMAN, J. *Six months of Canadian experience under a general price ceiling.* Dun's Rev., Aug., 1942. Pp. 8.

BLOCK, H. *German methods of allocating raw materials.* Soc. Research, Sept., 1942. Pp. 15.

BROMAGE, A. W. and PERKINS, J. A. *Willow Run produces bombers and intergovernmental problems.* Am. Pol. Sci. Rev., Aug., 1942. Pp. 8.

DAVIS, K. C. *The requirement of opportunity to be heard in the administrative process.* Yale Law Jour., May, 1942. Pp. 50.

DOUGLAS, M. *Limitations of the financial factor in a war economy.* Canadian Jour. Econ. and Pol. Sci., Aug., 1942. Pp. 13.

GLAESER, M. G. *The United States Supreme Court redeems itself.* Jour. Land and Pub. Util. Econ., May, 1942. Pp. 9.

HOLDEN, R. E. *General expenditure rationing with particular reference to the Kalecki plan.* Am. Econ. Rev., Sept., 1942. Pp. 11.

HITCH, C. J. *The controls in post-war reconstruction.* Oxford Econ. Papers, April, 1942. Pp. 14.

ISLES, K. S. *The building of a war economy.* Econ. Record, June, 1942. Pp. 17.

KAPLAN, J. J. *Rationing objectives and allotments, illustrated with sugar data.* Jour. Farm Econ., Aug., 1942. Pp. 17.

LEWINSOHN, R. *A nova organizacao economica nos Estados Unidos.* Rev. Serv. Pub., April, 1942. Pp. 8.

LAUTERBACH, A. T. *Economic demobilization in Great Britain after the First World War.* Pol. Sci. Quart., Sept., 1942. Pp. 18.

MENDIZABAL, M. O. de. *La situacion legal de la encomienda.* Investigacion Econ., Vol. 2, no. 2, 1942. Pp. 21.

MIKESELL, R. F., and GALBREATH, C. E. *Subsidies and price control.* Am. Econ. Rev., Sept., 1942. Pp. 14.

QUENTEL, O. D. S. *Do processo administrativo.* Rev. Serv. Pub., April, 1942. Pp. 4.

ROSENBAUM, E. M. *Bibliografia selecta sobre economia de guerra.* El Trimestre Econ., July-Sept., 1942. Pp. 32.

ROSTOW, W. W. *Some aspects of price control and rationing.* Am. Econ. Rev., Sept., 1942. Pp. 15.

SCITOVSZKY, T. de. *The political economy of consumers' rationing.* Rev. Econ. Stat., Aug., 1942. Pp. 11.

WALLIS, W. A. *How to ration consumers' goods and control their prices.* Am. Econ. Rev., Sept., 1942. Pp. 12.

WATKINS, M. W. *Present position and prospects of antitrust policy.* Am. Econ. Rev., Suppl., June, 1942. Pp. 30.

WORSWICK, G. D. N. *British raw material controls.* Oxford Econ. Papers, April, 1942. Pp. 41.

Enforcement of priority and rationing regulations. Yale Law Jour., May, 1942. Pp. 7.

Operation of the consent decree in the motion picture industry. Yale Law Jour., May, 1942. Pp. 21.

Industrial Organization; Price and Production Policies; Business Methods

BLAIR, J. M. *The relation between size and efficiency of business.* Rev. Econ. Stat., Aug., 1942. Pp. 11.

BOBER, M. M. *Price and production policies.* Am. Econ. Rev., Suppl., June, 1942. Pp. 20.

MOULTON, E. L. *The war and its impact on American business.* New Mexico Quart. Rev., Aug., 1942. Pp. 9.

SCHWARZ, S. M. *Heads of Russian factories—a sociological study.* Soc. Research, Sept., 1942. Pp. 19.

SILVERMAN, H. A. *The optimum firm in the boot and shoe industry.* Oxford Econ. Papers, April, 1942. Pp. 16.

STIGLER, G. J. *The extent and bases of monopoly.* Am. Econ. Rev., Suppl., June, 1942. Pp. 22.

Transportation; Communication; Public Utilities

CONRAD, von. *Der autonomiegedanke bei europäischen staatseisenbahnen.* Archiv f. Eisenbahnw., Sept.-Oct., 1941. Pp. 50.

FINNIE, R. *A route to Alaska through the Northwest Territories.* Geograph. Rev., July, 1942. Pp. 14.

GATES, J. E. *Forecasting the demand for electric energy: a rejoinder.* Jour. Land and Pub. Util. Econ., May, 1942. Pp. 3.

HOCKING, D. M. *The economics of the gas industry.* Econ. Record, June, 1942. Pp. 12.

HULTGREN, T. *American railroads in wartime.* Pol. Sci. Quart., Sept., 1942. Pp. 17.

JEMING, J. *An actual application of the reproduction-cost-of-service principle in rate making.* Jour. Land and Pub. Util. Econ., May, 1942. Pp. 16.

JONES, H. F. *Forecasting the demand for electric energy: a reply.* Jour. Land and Pub. Util. Econ., May, 1942. Pp. 3.

MURRAY, V. M. *Grand Coulee and Bonneville power in the national war effort.* Jour. Land and Pub. Util. Econ., May, 1942. Pp. 6.

O'LEARY, H. J. *Utility rate problems arising from recent and prospective income tax legislation.* Jour. Land and Pub. Util. Econ., May, 1942. Pp. 4.

RITCHIE, R. F. *Integration under section 10 (c) of the Public Utility Holding Company act.* Michigan Law Rev., Aug., 1942. Pp. 37.

TROXEL, E. *Capital structure control of utility companies by the Securities and Exchange Commission.* Jour. Bus., Univ. Chicago, July, 1942. Pp. 23.

WILSON, G. L. *Railroad land-grant rates.* Jour. Bus., Univ. Chicago, July, 1942. Pp. 13.

Pipe lines; system expanding to meet war demands. Index, N. Y. Trust Co., Autumn, 1942. Pp. 8.

Public control of petroleum pipe lines. Yale Law Jour., June, 1942. Pp. 21.

Agriculture; Forestry; Fisheries

ARIAS, A. C. *Influencias del clima y del suelo en la agricultura de la Republica Mexicana.* Investigacion Econ., Vol. 2, no. 2, 1942. Pp. 20.

BOOTH, J. F. *The economic problems of Canadian agriculture in the war and post-war period.* Canadian Jour. Econ. and Pol. Sci., Aug., 1942. Pp. 14.

BUNCE, A. C. *War and soil conservation.* Jour. Land and Pub. Util. Econ., May, 1942. Pp. 13.

DELAPLANE, W. H. *The war and an agricultural economy: the case of Colombia.* So. Econ. Jour., July, 1942. Pp. 13.

DIGBY, M. *Agriculture in the post-war European settlement.* II Fabian Quart., Summer, 1942. Pp. 9.

KRISHNASWAMI, A. *Rural credit.* Indian Jour. Econ., April, 1942. Pp. 25.

NELSON, A. Z. *Conservation expenditures on federal lands.* Jour. Farm Econ., Aug., 1942. Pp. 10.

REGAN, M. M. *The farm real estate market in war time.* Jour. Land and Pub. Util. Econ., May, 1942. Pp. 6.

SELBY, H. E. *A method of determining feasible irrigation payments.* Jour. Farm Econ., Aug., 1942. Pp. 10.

SHEPHERD, G. *Stabilization operations of the Commodity Credit Corporation.* Jour. Farm Econ., Aug., 1942. Pp. 22.

WORKING, H. *Agricultural price policies in war time.* Jour. Farm Econ., Aug., 1942. Pp. 14.

Economic Geography; Regional Planning; Urban Land; Housing

CURTIS, C. A. *Housing in Canada.* Canadian Banker, July, 1942. Pp. 16.

KEYES, S. *Some considerations in the economic possibilities of slum clearance.* Jour. Land and Pub. Util. Econ., May, 1942. Pp. 6.

KRAENZEL, C. F. *New frontiers of the Great Plains.* Jour. Farm Econ., Aug., 1942. Pp. 18.

MURPHY, K. R. *Housing for war workers.* Mo. Lab. Rev., June, 1942. Pp. 21.

WEINTRAUB, R. G. and TOUGH, R. *Federal housing and World War II.* Jour. Land and Pub. Util. Econ., May, 1942. Pp. 8.

Labor and Industrial Relations

BRANDT, K. *Is Germany exhausting her man power?* Foreign Affairs, Oct., 1942. Pp. 13.

BRAUNTHAL, A. *American labor unions and the war.* Soc. Research, Sept., 1942. Pp. 22.

BROWN, E. C. *The employer unit for collective bargaining in National Labor Relations Board decisions.* Jour. Pol. Econ., June, 1942. Pp. 36.

CHAMBERLAIN, J. *Labor in wartime.* Yale Rev., Autumn, 1942. Pp. 15.

DOAN, M. C. *State labor relations acts.* Quart. Jour. Econ., Aug., 1942. Pp. 53.

GRESHAM, M. and BLOCH, J. W. *Labor aspects of the Chicago milk industry.* Mo. Lab. Rev., June, 1942. Pp. 27.

JOINER, F. and KENNEDY, V. D. *Incentive wage plans and collective bargaining.* Mo. Lab. Rev., July, 1942. Pp. 14.

KEIM, W. G. *Prices and wages.* Jour. Am. Stat. Assoc., Sept., 1942. Pp. 6.

KNOX, F. A. *The post-war employment problem.* Canadian Banker, July, 1942. Pp. 14.

LIVCHEN, R. *Wartime developments in German wage policy.* Internat. Lab. Rev., Aug., 1942. Pp. 30.

MOLONEY, J. F. *Some effects of the Federal Fair Labor Standards act upon southern industry.* So. Econ. Jour., July, 1942. Pp. 9.

MURPHY, K. R. and KRIXTEIN, S. *War and the increase in federal employment.* Mo. Lab. Rev., Aug., 1942. Pp. 6.

NORTHRUP, H. R. *The Tobacco Workers International Union.* Quart. Jour. Econ., Aug., 1942. Pp. 21.

O'LEARY, J. J. *A general wage ceiling.* So. Econ. Jour., July, 1942. Pp. 9.

PRIBRAM, K. *The ILO: present functions and future tasks.* Foreign Affairs, Oct., 1942. Pp. 10.

SCHWARTZ, H. *On the wage structure of agriculture.* Pol. Sci. Quart., Sept., 1942. Pp. 15.

SPEEK, P. A. *Foreign workers in German war efforts.* Mo. Lab. Rev., June, 1942. Pp. 10.

WAELBROECK, P. *Labour redistribution for war industry.* Internat. Lab. Rev., April, 1942. Pp. 28.

WELLS, F. A. *Voluntary absenteeism in the cutlery trade.* Rev. Econ. Stud., Summer, 1942. Pp. 22.

Judicial intervention in revolts against labor union leaders. Yale Law Jour., June, 1942. Pp. 9.

Labour redistribution in Germany: the work of the employment service. Internat. Lab. Rev., April, 1942. Pp. 7.

Mobilization of industry and labor in Great Britain. Mo. Lab. Rev., July, 1942. Pp. 17.

Recent developments in joint production machinery in Great Britain. Internat. Lab. Rev., Sept., 1942. Pp. 15.

The war and merchant seaman. Part II: *Life-saving appliances.* Part III: *Organization for seamen's welfare in Canada.* Internat. Lab. Rev., June, July, 1942. Pp. 30, 4.

Social Insurance; Relief; Pensions; Public Welfare

BUSTAMANTE, M. E. *La clinica social como complemento de la clinica medica.* Rev. Mexicana de Soc., Primer Trimestre, 1942. Pp. 10.

FITCH, L. C. *The unemployment insurance system as a solution to war and post-war problems.* Pol. Sci. Quart., Sept., 1942. Pp. 15.

MYRDAL, A. *Social security in war and peace.* Trusts and Estates, June, 1942. Pp. 50.

TIBAUDIN, J. *El problema de la vivienda del trabajador.* Rev. de. Ciencias Econ., March, 1942. Pp. 19.

VIADO, M. DE. *The aims and achievements of the Chilean Preventive Medicine act.* Internat. Lab. Rev., Aug., 1942. Pp. 13.

Consumption; Income Distribution; Coöperation

MATHERLY, W. J. *The development of consumer economics.* So. Econ. Jour., July, 1942. Pp. 9.

ROSSO, O. V. *Las asociaciones de cooperación y crédito popular.* Rev. de Ciencias Econ., March, April, 1942. Pp. 23, 18.

WOODBURY, R. M. *Food consumption and nutrition in the Americas.* Internat. Lab. Rev., Sept., 1942. Pp. 39.

What is the cost-of-living index? Mo. Lab. Rev., Aug., 1942. Pp. 10.

Population; Migration; Vital Statistics

BOSSANO, L. *Sobre el exceso de poblacion.* Rev. Mexicana de Soc., Primer Trimestre, 1942. Pp. 4.

DORN, H. F. *The potential rate of increase of the population of the United States.* Am. Jour. Soc., Sept., 1942. Pp. 15.

FISHER, G. M. *Japanese evacuation from the Pacific Coast.* Far East. Survey, June 29, 1942. Pp. 5.

FRANKLIN, N. N. *Economic welfare and the development of the native reserves.* So. African Jour. Econ., March, 1942. Pp. 15.

GLICK, P. C. *Family trends in the United States, 1890 to 1940.* Am. Soc. Rev., Aug., 1942. Pp. 10.

GREENWOOD, M. *British loss of life in the wars of 1794-1815 and in 1914-1918* (with discussion). Jour. Royal Stat. Soc., 1942. Pt. 1. Pp. 16.

HAWLEY, A. H. and BOGUE, D. J. *Recent shifts in population: the drift toward the metropolitan district, 1930-40.* Rev. Econ. Stat., Aug., 1942. Pp. 6.

JAFFE, A. J. *Urbanization and fertility.* Am. Jour. Soc., July, 1942. Pp. 13.

LAVIOLETTE, F. E. *Japanese evacuation in Canada.* Far East. Survey, July 27, 1942. Pp. 5.

READ, M. *Migrant labour in Africa and its effects on tribal life.* Internat. Lab. Rev., June, 1942. Pp. 27.

STEVENSON, A. *Some aspects of fertility and population growth in Vienna.* Am. Soc. Rev., Aug., 1942. Pp. 10.

Age composition of the population. Mo. Lab. Rev., Aug., 1942. Pp. 4.

NOTES

PRELIMINARY PROGRAM OF THE FIFTY-FIFTH ANNUAL MEETING OF THE AMERICAN ECONOMIC ASSOCIATION

(Scheduled for Cleveland, Ohio, December 29-31, 1942, and cancelled on November 20, in response to the request issued by the Office of Defense Transportation that civilian travel be curtailed during late December and early January.)

Tuesday, December 29

10:00 A.M. 1. In What Areas or For What Functions Is Private Enterprise Necessary or Superior?—chairman, Bernard F. Haley, Stanford University

Papers: James M. Barker, Sears, Roebuck and Company; Henry C. Simons, University of Chicago

Discussion: C. C. Abbott, Harvard Business School; Myron Spencer, University of Cincinnati

10:00 A.M. 2. Problems Related to Price Control and Rationing (joint meeting with the American Statistical Association and American Marketing Association)—chairman, Theodore N. Beckman, Ohio State University

Papers: Milton Gilbert, United States Department of Commerce, "The National Income: War and Civilian"; J. K. Galbraith, Office of Price Administration, "The Price Control Problem"; "Rationing"; "Enforcement of Price Control"

2:30 P.M. 1. The Restoration of International Trade—chairman, to be announced

Papers: Lynn R. Edminster, United States Tariff Commission; Redvers Opie, British Embassy

Discussion: Geoffrey Crowther, Combined Production and Resources Board; Gottfried Haberler, Harvard University; Frank D. Graham, Princeton University

2:30 P.M. 2. Our Industrial Plant When Peace Comes—Paul T. Homan, War Production Board

Papers: Glenn E. McLaughlin, National Resources Planning Board, "Wartime Expansion in Industrial Capacities"; Edwin M. Martin, War Production Board, "Government Ownership or Control of War-Created Plant"; Joe S. Bain, University of California, "Effect of the War on Corporate Concentration"

Discussion: George Terborgh, Machinery and Allied Products Institute; Stacy May, War Production Board

2:30 P.M. 3. Problems Related to Price Control and Rationing (joint round table meeting with the American Statistical Association)—chairman, Henry Arthur, Swift and Company

Discussion: E. T. Grether, University of California; O. V. Wells, United States Department of Agriculture; T. O. Yntema, Cowles Commission

8:00 P.M. 1. Financial and Government Contract Adjustments of Industry at the End of the War (joint meeting with the American Statistical Association)—chairman, Alvin H. Hansen, Federal Reserve Board

Papers: William H. Moore, Hanover College, "Termination of Contracts and Disposal of Supplies after the First World War"; Hans Klagsbrunn, Defense Plant Corporation, "Methods of Financing War Industry Today"; Houlder Hudgins, War Production Board, "Issues and Policies of Control Termination and Plant and Stock Disposal"; "The Place and Problems of Private Industrial Finance"

Discussion: To be announced

8:00 P.M. 2. The Future of International Investment (joint round table meeting with the American Statistical Association)—chairman, Amos Taylor, United States Department of Commerce

Papers: V. Schoepperle, National City Bank, "Private versus Public Foreign Lending"; Frank W. Fetter, Haverford College, "The Need for Foreign Capital Investment"; C. P. Kindleberger, Office of Strategic Services, "The Planning of Foreign Investments"

Wednesday, December 30

10:00 A.M. 1. In What Areas or for What Economic Functions Is Government Action Necessary or Superior?—chairman, to be announced

Papers: Adolph A. Berle, Assistant Secretary of State; Alan R. Sweezy, William College

Discussion: Leverett S. Lyon, Chicago Association of Commerce; Frederic B. Garver, University of Minnesota

10:00 A.M. 2. Problems of Public Policy Raised by Collective Bargaining—chairman, to be announced

Papers: David A. McCabe, Princeton University, "Problems of Industry-Wide or Regional Trade Union Agreements"; C. O. Gregory, University of Chicago, "Problems of Public Policy Raised by the Provision of Trade Agreements"; Gordon R. Clapp, Tennessee Valley Authority, "Problems of Union Relations in Public Agencies"

Discussion: Abram L. Harris, Howard University

2:30 P.M. 1. International Financial Relations after the War—chairman, James W. Angell, Columbia University

Papers: A. Eugene Staley, Fletcher School of Law and Diplomacy, and Eugene Rostow, State Department, "The Economic Implications of Lend-Lease"; Harry D. White, United States Treasury Department, "The Problem of Post-War Currency Stabilization"

Discussion: A. F. W. Plumptre, Canadian Legation; R. L. Hall, British Supply Office; John Cover, Office of Lend-Lease

2:30 P.M. 2. Organized Labor and the Farmer (joint meeting with the American Farm Economic Association)—chairman, Sumner H. Slichter, Harvard University

Papers: Kenneth H. Parsons, University of Wisconsin, "The Basis for the Growing Tension between Agriculture and Labor"; Lloyd G. Reynolds, Johns Hopkins University, "Farm Price-Industrial Wage Parity"

Discussion: John D. Black, Harvard University

2:30 P.M. 3. Wartime Taxation (joint round table meeting with the American Statistical Association)—chairman, W. L. Crum, Harvard University

Discussion: Simeon E. Leland, University of Chicago; M. Slade Kendrick, Cornell University; Lawrence H. Seltzer, Wayne University; J. Raymond Walsh, Congress of Industrial Organizations

8:00 P.M. 1. Our Labor Force When Peace Comes—chairman, A. Ford Hinrichs, Bureau of Labor Statistics

Papers: Charles Stewart, Bureau of Labor Statistics, "Degree and Character of Wartime Expansion of the National Labor Force"; Richard A. Lester, Duke University, "Effects of the War on Hours, Pay, and Scale of Living"; Robert Gray, California Institute of Technology, "Impact of the War on Technical Training and Occupational Mobility"

Discussion: Paul L. Stanchfield, Michigan Unemployment Compensation Commission; Harold J. Ruttenberg, Congress of Industrial Organizations; Boris Shishkin, American Federation of Labor

8:00 P.M. 2. Economic Regionalism and Multilateral Trade—chairman, to be announced

Papers: Paul van Zeeland, Belgian Economic Mission, and Antonin Basch, Columbia University, "European Economic Regionalism"; F. Hilgerdt, Institute for Advanced Study, "The Case for Multilateral Trade"; William F. Holland, Institute of Pacific Relations, "Post-War Relations in the Far East"

Discussion: Margaret Gordon, Office of Price Administration; Henry Chalmers, Department of Commerce

Thursday, December 31

10:00 A.M. Division of Labor Between Government and Private Business—chairman, Wesley C. Mitchell, Columbia University

Papers: Clifford J. Durr, Federal Communications Commission; Lewis H. Brown, Johns-Manville Corporation; Fritz Machlup, University of Buffalo

Discussion: Maynard C. Krueger, University of Chicago; J. Frederic Dewhurst, Twentieth Century Fund

12:30 P.M. Presidential Address: Edwin G. Nourse

2:30 P.M. 1. Bases of International Economic Relations (round table meeting)—chairman, Leo Pasvolsky, Department of State

Participants: To be announced

2:30 P.M. 2. International Commodity Agreements (round table meeting)—chairman, Joseph S. Davis, Food Research Institute

Participants: Andrew Cairns, International Wheat Council; Robert M. Carr, Department of State; Egan Glesinger, Comité International du Bois; A. Rosenberg, League of Nations; L. A. Wheeler, United States Department of Agriculture

2:30 P.M. 3. Labor Problems (round table meeting)—chairman, Sumner H. Slichter, Harvard University

Papers: Clarence D. Young, Wesleyan College, "Estimation of Employment and Unemployment"; W. Rupert MacLaurin, Massachusetts Institute of Technology, "The Interpretation of Industrial Wage Patterns"

Discussion: To be announced

2:30 P.M. 4. Qualifications of Economists in Public Service (round table meeting)—chairman, Morris A. Copeland, War Production Board

Participants: To be announced

The following names have recently been added to the membership of the AMERICAN ECONOMIC ASSOCIATION:

Agisim, P., Apt. 8, 4312 Kaywood Drive, Mt. Rainier, Md.
Anrod, C. W., 5060 N. Winthrop Ave., Chicago, Ill.
Arkus, P. J., 2000 S St. N.W., Washington, D.C.
Arnolds-Patron, P., Division of Commerce, Texas Technological College, Lubbock, Tex.
Ashmen, Lt. R., Administrative Asst., Ship's Service Dept., U. S. Naval Air Station, Jacksonville, Fla.
Ashton-Hatley, G., Apartado 809, Caracas, Venezuela, South America.
Begdes, K., Dept. of Economics, Indiana University, Bloomington, Ind.
Bishop, M. C., 1809 Queens Lane, Arlington, Va.
Bledsoe, W. A., U. S. Department of Labor, Regional Office, 1355 Market St., San Francisco, Calif.
Borendame, J. E., Jr., 2280 Board of Trade Bldg., 141 W. Jackson Blvd., Chicago, Ill.
Bradley, J. H., 619 Sarbonne Road, Los Angeles, Calif.
Breier, F. A., Faculty Club, University of California, Berkeley, Calif.
Bresky, H., 540 W. 157th St., New York, N.Y.
Brown, J. E., Southwestern University, Georgetown, Tex.
Buchanan, Ensign J. M., Cincpac Staff, c/o Postmaster, San Francisco, Calif.

Bukovsky, A. P., 1701 Swann St. N.W., Washington, D.C.
Burger, A. A., 605 Broad St., Newark, N.J.
Burk, M., 1912 Third St. N.E., Washington, D.C.
Calmus, H. S., 225 Sterling Place, Brooklyn, N.Y.
Cammack, T. E., 333 S. 43rd St., Philadelphia, Pa.
Cherniack, N., 111 Eighth Ave., New York, N.Y.
Cox, S. J., 5420 Newark St. N.W., Washington, D.C.
Davidson, R., 210 Sixth Ave., New York, N.Y.
Denis, R. M., 128 Oxford St., Cambridge, Mass.
Dirksen, Rev. C., St. Joseph's College, Collegeville, Ind.
Doleshy, F., c/o Mrs. Frank Doleshy, 205 S. 28th, Yakima, Wash.
Eastburn, W. N., 169 Halsted St., East Orange, N.J.
Eaton, H. O., U. S. Dept. of Commerce, Bur. of Foreign and Domestic Commerce, Washington, D.C.
Feahr, Lt. W. J., Quarters H-3-F, Naval Operating Base, Norfolk, Va.
Ferman, Cadet I., A.A.F.N.S., Class-42-17, Hondo, Tex.
Flink, S., University of Newark, Newark, N.J.
Fredrickson, J. W., 5459 W. Augusta Blvd., Chicago, Ill.
Glade, F. H., Jr., School of Commerce, New York University, Washington Sq., New York, N.Y.
Glatzert, P. L., 258 N. Bellefield St., Pittsburgh, Pa.
Goff, J. H., Auburn, Ala.
Grunberg, E., 5535 Oak St., Kansas City, Mo.
Hampel, L. F., 222 N. Oak Park Ave., Oak Park, Ill.
Heuser, H. K., Office of Strategic Services, Temp. Bldg. 14, Washington, D.C.
Hilton, H., Jr., 1473 Meridian Pl., Washington, D.C.
Ho, F., 2374 Massachusetts Ave. N.W., Washington, D.C.
Hubbard, J. C., Box 39, Wesleyan Station, Middletown, Conn.
Kadlicek, F. C., 46-09 Little Neck Parkway, Little Neck, N.Y.
Kelly, J. R., Box 1210, King City, Calif.
Kovarik, R. C., Hallam, Neb.
Landry, R. J., 1717 G St. N.W., Washington, D.C.
Leavitt, J. A., 17 Lexington Ave., New York, N.Y.
Levinson, H. M., Dept. of Economics, University of Michigan, Ann Arbor, Mich.
Lo, W.-S., China Defense Supplies, 1601 V St. N.W., Washington, D.C.
Lowing, H. J., 7645 Sheridan Ave., Chicago, Ill.
MacKenzie, W. J., 403 Blackhawk St., Chicago, Ill.
Mateo, F. A., Jirón Callao 757, Lima, Peru, South America.
McCleish, E., 1817 H St. N.W., Washington, D.C.
McGinley, Rev. J. J., America, 329 W. 108th St., New York, N.Y.
Mossé, R., 114-04 76th Road, Kew Gardens Hills, Long Island, N.Y.
Peterson, E. J., School of Business Administration, University of Minnesota, Minneapolis, Minn.
Picard, R., 21 Alexander Ave., White Plains, N.Y.
Raymond, R. L., Jr., 38 Newbury St., Boston, Mass.
Scott, J. W., Alabama Polytechnic Institute, Auburn, Ala.
Severance, G. B., Box 2804, Stanford University, Calif.
Spears, R. F., 1189 Commonwealth Ave., Brighton, Mass.
Stevens, R. W., Dept. of Economics, University of Michigan, Ann Arbor, Mich.
Thomasine, Sister, Rosary College, River Forest, Ill.
Tully, A. M., 445 Riverside Drive, New York, N.Y.
Valstar, S. M. D., Royal Netherlands Steamship Co., 25 Broadway, New York, N.Y.
Van Tuyl, H. L., 318 N. Washington St., Alexandria, Va.
Wallis, W. A., Division of War Research, Columbia University, 401 W. 118th St., New York, N.Y.
Weiss, L., 3728 Legation St. N.W., Washington, D.C.
Wyngarden, H. J., Dept. of Economics, Michigan State College, East Lansing, Mich.
Zubrow, R. A., 20 Garden Drive, Roselle, N.J.

Through an error in indexing, the customary order of the names of the authors of books reviewed and the writers of the reviews were reversed on pages i and ii of the June, 1942, number. Corrected pages are available for those who wish to replace the faulty sheet. Please send your request to the Editor, at 722 Jackson Place, N.W., Washington, D.C. All books reviewed in the June number are, of course, included in the Annual Index which appears as the final pages of this number.

The first meeting of the Bureau or Executive Committee of the Inter American Statistical Institute originally scheduled to meet in Rio de Janeiro, was held in Charlottesville, Virginia, August 21-23, with a bare quorum made up of the three North American members in attendance. Absent were the president, M. A. Teixeira de Freitas of Brazil, and the second vice president, Carlos E. Dieulefait of Argentina. Attending from the Bureau were Stuart A. Rice of the United States, first vice president; Ramón Beteta of Mexico, third vice president; and Robert H. Coats of Canada, treasurer; and from the Temporary Secretariat H. L. Dunn, secretary-general; and Miss E. Phelps, executive assistant.

The conditions of the Institute's statutes having been met by the formal adherence of "at least six" governmental members (actually seven—the Dominican Republic, Bolivia, Mexico, Costa Rica, United States, Brazil and Peru) and by an assured "annual operating income of not less than $10,000," full control of the Institute's affairs was taken over by the Bureau from the Temporary Organizing Committee. Washington was tentatively chosen for the duration of the war as the permanent seat of the Institute, and H. L. Dunn was elected secretary-general.

Juan de Dios Bojórquez of Mexico was elected editor-in-chief of the Institute's journal, the first number of which is expected to appear early in 1943, and Mr. Coats, chairman of the committee on current publications, was asked to make an early trip to Mexico City to perfect publishing arrangements with him. Other committees established were on an inter American statistical yearbook, on statistical courses, training programs and textbooks, on demographic statistics, and on projects.

The secretary-general was instructed to make an early trip to South America to confer with officers and members of the Institute in that continent, but travel priorities for his trip have subsequently been withdrawn, and certain assignments have instead been given to Forrest Linder, a participant in the Pan American Sanitary Congress at Rio de Janeiro.

Jens P. Jensen of the University of Kansas died August 25, 1942.

Appointments and Resignations

Ruth A. Allen, professor of economics at the University of Texas, has been appointed to the Women's Policy Committee of the War Manpower Board.

Clay J. Anderson, head of the department of economics and commerce at Central Missouri State Teachers College, is on leave of absence while serving as economist in the Bureau of Foreign and Domestic Commerce, Washington.

A. E. Andress of Hiram College taught economics at West Virginia University during the summer session.

Willard C. Beatty, assistant professor of economics at Brown University, has been granted a leave of absence to serve as State Price Officer for the Rhode Island Office of Price Administration.

Kutsi Begdes has been appointed part-time instructor in economics at Indiana University.

John F. Bell, professor of economics, has resumed his work at the University of Illinois after having leave of absence while serving with the Office of Price Administration.

Abram Bergson is on leave from the University of Texas to work with the Office of Strategic Services in Washington.

Philip W. Bishop has been appointed instructor in accounting and corporation finance at Oberlin College for the academic year 1942-43.

J. C. D. Blaine, assistant professor of business organization at the University of North

Carolina, has been granted a leave of absence to accept a commission in the Pay Roll Corps of the Canadian Army.

Roy G. Blakey, professor of economics at the University of Minnesota, was elected vice president of the National Tax Association at its annual conference held at Cincinnati during October.

Jay Blum of Kenyon College is serving as assistant professor of economics at Duke University this year.

Francis M. Boddy, professor of economics at the University of Minnesota, has taken a position in the Lead, Tin and Zinc Section of the Office of Price Administration.

T. H. Boggs of the department of economics, Stanford University, has been appointed acting executive head of the department.

J. Russell Boner has resigned as instructor of economics at the University of Illinois to accept a position with the Bureau of Foreign and Domestic Commerce.

A. T. Bonnell, assistant professor of economics at the University of North Carolina, has been granted a leave of absence to serve as economist with the State Department.

R. M. Bourne, assistant professor of economics at the University of Wyoming, has been granted leave of absence to accept an appointment with the Office of Price Administration.

P. F. Boyer has been appointed associate professor of business administration in the College of Commerce of Louisiana State University.

R. W. Bradbury of Louisiana State University has been granted leave of absence to serve with the State Department in Latin America for the duration of the war.

Philip D. Bradley, instructor in economics at Harvard University, has been granted leave of absence for the first semester of 1942-43 to travel and do research in South America. Mrs. Bradley, formerly of the Simmons College economics staff, will accompany him and will also carry out a research project.

Louis K. Brandt, formerly of the University of Wisconsin, is assistant professor of economics at the University of Texas.

Royal J. Briggs has resigned as assistant professor of economics at South Dakota State College to report for active duty as a Lieutenant (j.g.) with the Naval Reserve, temporarily based at Treasure Island, California.

Winfield S. Briggs, formerly head of the accounting department of Manhattan College, has been appointed assistant professor of accounting at Rhode Island State College.

E. Cary Brown, formerly teaching fellow and tutor in economics at Harvard University, is now with the Treasury Department at Washington.

Emily C. Brown of the department of economics at Vassar College is on leave for the year 1942-43 to serve as operating analyst for the National Labor Relations Board in Washington.

Gerald A. Brown of the University of North Carolina is with the Atlanta office of the National Labor Relations Board.

William Adams Brown, Jr., professor of economics at Brown University, spent the summer collaborating with the economic and financial section of the League of Nations at the Institute for Advanced Study, Princeton.

L. F. Brush has been appointed instructor in accounting in the College of Commerce, Louisiana State University.

Arthur F. Burns, on leave from Rutgers University, is visiting professor in the department of economics at Columbia University.

John E. Candelet has resigned as head of the department of economics of Rhode Island State College and accepted a commission as a Lieutenant in the Navy.

Eli W. Clemens has resigned his position at Southwestern Louisiana Institute to accept a position as associate professor of economics and public utilities in the College of Business and Public Administration, University of Maryland.

R. H. Coats, formerly Dominion statistician, has been appointed a special lecturer for the session 1942-43, in the department of political economy of the University of Toronto.

J. Herschel Coffee is on leave from West Texas State Teachers College to pursue graduate work on a part-time instructorship at the University of Texas.

J. Allen Cook has resigned from the department of political economy at the University of Toronto to enter the American Army Air Corps.

Arthur G. Coons, director of studies at the Claremont Colleges and now State Price Officer in Southern California with the Office of Price Administration, has been appointed dean and professor of economics at Occidental College. He will take up his duties in September 1943.

Clyde J. Crobaugh has resigned as head of the department of economics at Bethany College and accepted the position of chairman of the department of marketing at Fenn College, Cleveland.

Ernest Dale has recently been appointed instructor in economics at Yale University.

Carroll R. Daugherty, chairman of the department of economics at Hunter College, has accepted the position of director of the Division of Research and Review of the National War Labor Board.

Carl T. Devine, formerly of the University of Kansas City, has been appointed associate in the School of Business Economics at the Johns Hopkins University.

Dudley Dillard, recently with the Board of Investigation and Research, Washington, has resigned to accept a position as assistant professor of economics in the College of Business and Public Administration, University of Maryland.

James C. Dockeray has resigned from the James Millikin University to become professor of business finance in the College of Business and Public Administration, University of Maryland.

Peter Drucker has been appointed to the faculty of Bennington College, where he will teach courses in humanities and political economy.

Allan B. Edwards has been appointed instructor in economics at the University of Virginia.

Kurt Ehlers, formerly of the University of Indiana, is now assistant professor of economics at Clark University.

Wilford J. Eiteman, assistant professor of economics at Duke University, has had his leave of absence extended for another year to enable him to accept the appointment of price executive at Juneau, Alaska, with the Office of Price Administration.

Ralph C. Epstein, dean of the School of Business Administration at the University of Buffalo, has been granted a leave of absence to serve with the War Production Board in Washington.

Frank Bowen Evans, instructor at the University of North Carolina, has been commissioned as an Ensign in the Navy.

Earle F. Ford has resigned as part-time instructor in accounting at Rhode Island State College.

J. Fagg Foster, formerly an instructor in economics at the University of Texas, is assistant professor at Kenyon College.

C. Edward Galbreath has resigned his position at the Office of Price Administration and been commissioned a Lieutenant (j.g.) in the Navy.

David G. Geffner, instructor in business law at Rhode Island State College, has resigned to accept a position in the Adjutant General's department of the Army.

Ernest W. Gibson has been appointed assistant professor of business administration at Texas Christian University for 1942-43.

Eli Ginzberg of the Columbia University School of Business is on leave of absence while serving with the Services of Supply of the War Department.

Joseph Gordon, formerly with the Stockpile and Shipping Branch, War Production Board, has been principal economist at the Production Division, Office of Petroleum Coördinator for War, since May.

Wendell C. Gordon, formerly an instructor in economics at the University of Texas, is now in the Army.

Paul Gregory of the Department of Agriculture is serving as instructor in economics at Duke University this year.

Gertrud Greig is now an instructor in economics at Wellesley College.

Albert Griffin has been promoted from assistant to associate professor of business administration at Emory University.

Wilbur H. Haass, formerly of the University of Wisconsin, has been appointed instructor in accounting and economics in the School of Business Administration, University of Tennessee.

E. E. Hale has resigned as State Price Administrator for Texas to return to his position as professor of economics at the University of Texas.

Charles A. Hales, professor of economics, has been made chairman of the Division of Social Studies at Colorado State College of Education.

Bernard F. Haley of the department of economics, Stanford University, has taken leave of absence to serve as director of the Textile, Leather and Apparel Division of the Office of Price Administration in Washington.

James K. Hall of the University of Washington is serving as State Price Officer for the state of Washington with the Office of Price Administration.

Marjorie Linfield Handsaker is teaching economic statistics at Occidental College by special appointment.

George E. Hargest of New York has joined the teaching staff of Clark University as assistant professor of business administration.

Donald Harter has been made acting assistant professor of political science in the School of Business and Public Administration at the University of Missouri.

Seymour E. Harris, associate professor at Harvard University, has been granted a leave of absence for 1942-43 to do full-time work in Washington as director of import-export price control, Office of Price Administration.

I. T. Hawley of the University of North Carolina has been appointed State Price Executive with the Office of Price Administration in Alabama.

Floyd B. Haworth, associate in economics at the University of Illinois, spent the summer with the Board of Investigation and Research, Washington.

Harold E. Hardy has been made acting assistant professor of economics in the School of Business and Public Administration at the University of Missouri.

K. F. Helleiner has been appointed a lecturer for the session 1942-43 in the department of political economy, University of Toronto.

Leo Herbert has been appointed instructor in accounting in the College of Commerce, Louisiana State University.

James R. Hibbs has resigned as instructor in economics at the University of Illinois to accept a position at Carleton College.

Randall Hinshaw, formerly of Princeton University, has been appointed teaching fellow and tutor in economics at Harvard University for the year 1942-43.

Walter E. Hoadley, Jr., is now serving as industrial economist with the Federal Reserve Bank of Chicago.

G. L. Hodge has been appointed assistant to the dean of the College of Commerce, Louisiana State University.

John A. Hogan, formerly tutor and instructor at Harvard University, has been appointed an instructor in the department of economics and sociology at Tufts College for the year 1942-43.

Edgar M. Hoover, Jr., associate professor of economics at the University of Michigan, is now chief of the materials and equipment requirements section, of the Facilities and Construction Program Branch, War Production Board, Washington.

David L. Horowitz has received a continuance of his leave of absence from the position of Labor Relations Examiner, New York State Labor Relations Board, to accept an appointment as lecturer on industrial relations at Harvard University, made jointly by the Graduate School of Public Administration and the Graduate School of Business Administration.

S. H. Houston has been appointed instructor in economics in the College of Commerce, Louisiana State University.

Keith W. Johnson, formerly an assistant economic analyst with the construction staff of the Bureau of Foreign and Domestic Commerce, is now an associate economic analyst with the Materials Branch, Statistics Division of the War Production Board, Washington.

Andrew M. Kamarck, formerly of the office of the Secretary of the Treasury Department, is now on active duty in the Army, at the Field Artillery School, Fort Sill.

Forrest E. Keller, associate professor of economics at West Virginia University, has been commissioned as a Lieutenant in the Naval Reserve.

Arthur Kemp, formerly at New York University, is now an instructor in economics at Yale University.

Clark Kerr of the University of Washington is now serving as assistant State Price Officer in the Seattle office of the Office of Price Administration.

Vera Kilduff, formerly of Webber College, has been appointed instructor in economics at Vassar College for the year 1942-43.

Asa S. Knowles has resigned as dean of the College of Business Administration at Northeastern University and accepted a similar appointment at Rhode Island State College, where he will be professor of industrial administration, director of industrial extension and dean of the School of Business Administration.

Paul A. Kohler has been appointed instructor in accounting in the College of Commerce, Louisiana State University.

Alan C. Lanyon, formerly with the Statistics Division of the War Production Board, Washington, has been appointed instructor in economics and natural resources in the College of Business and Public Administration, University of Maryland.

Svend Laursen, formerly instructor in economics at Harvard University, is in Washington at the Office of Strategic Services.

Wassily Leontief, associate professor at Harvard University and now serving as chief of operational studies in the Post-war Division of the Bureau of Labor Statistics, has been elected to membership in the American Academy of Arts and Sciences.

Robert Miller Lewis has been appointed teaching fellow and tutor in economics at Harvard University for the year 1942-43.

Simon Litman, professor emeritus, has been recalled to give courses in economics at the University of Illinois for the first semester of 1942-43.

H. A. Logan of the department of political economy at the University of Toronto has been promoted from associate professor to professor.

Fritz Machlup, professor of economics at the University of Buffalo, has been freed from teaching duties for the year 1942-43 in order to devote his time to research under a grant-in-aid from the Rockefeller Foundation to the University of Buffalo.

Edna Macmahon, formerly with the New York State Labor Department as director of research in the Division of Minimum Wage and Women in Industry, has been appointed assistant professor of economics at Vassar College for the year 1942-43.

C. B. Macpherson has been granted a leave of absence from the department of political economy at the University of Toronto to lecture in the department of political economy at the University of New Brunswick.

John F. Markey, recently with the Institute of Applied Econometrics, New York City, has resigned to accept a position as associate professor of economics and marketing with the College of Business and Public Administration, University of Maryland.

Yves R. Maroni has been appointed teaching fellow in economics at Harvard University for the year 1942-43.

D. F. Martin, Jr., assistant professor of economics at the University of North Carolina, has been called to active service in the Army as a Lieutenant.

James A. Maxwell of Clark University is at present connected with the Fuel Rationing Division of the Office of Price Administration in Washington.

Kenneth M. McCaffree has been appointed instructor in economics at the University of Denver.

Don H. McClelland has been appointed instructor in economics at Brown University.

Mrs. Marian Meinkoth has been appointed part-time assistant in economics at the University of Illinois.

Max Millikan, professor of economics and research associate at Yale University, has been on leave since July in order to take a position with the War Shipping Administration, Washington, D.C.

Leon Milliken, instructor in economics at Rhode Island State College, has entered the Navy.

Waldo F. Mitchell is on leave of absence from Indiana State Teachers College for the year 1942-43 to be visiting professor of economics at Indiana University, where he is teaching courses in money and banking.

Theodosi A. Mogilnitsky has been promoted to associate professor at Loyola University, Chicago.

R. H. Montgomery is on leave from the University of Texas to work with the Board of Economic Warfare.

J. Theodore Morgan, formerly at Randolph-Macon Woman's College, has been appointed instructor and tutor in economics at Harvard University for 1942-43.

J. E. Morton of the department of economics at Knox College has been advanced to the rank of professor of statistics and economics.

Robert Mossey, formerly professor of economics at the University of Grenoble, has been appointed special research professor in the College of Economics and Business at the University of Washington.

O. T. Mouzon has been granted a leave of absence from the University of North Carolina for the fall quarter to serve as a civilian expert with the Army Quartermaster Corps in Washington.

John H. Myers has been promoted from instructor to assistant professor of economics in the School of Business Administration at the University of Buffalo.

Otto Nathan, formerly of New York University, has been appointed professor of economics at Vassar College for the year 1942-43.

E. G. Nelson of the department of economics, Stanford University, has taken leave of absence to serve in the Office of Price Administration in New York City.

Edmund A. Nightingale is on leave from the University of Minnesota to serve as principal industrial specialist with the transportation committee of the War Production Board, Washington.

Ruby Turner Norris, assistant professor of economics at Vassar College, is on leave for the year 1942-43, to serve as senior economist for the Office of Price Administration in Honolulu.

Arden B. Olson, formerly head of the department of commerce at the Arizona State Teachers College, Flagstaff, has been appointed associate professor of economics at the University of Denver.

Lewis M. O'Quinn is on leave from Louisiana Polytechnic Institute to pursue graduate work on a part-time instructorship in economics at the University of Texas.

Herbert H. Palmer, formerly of the College of Business Administration at Syracuse University, has recently been appointed assistant professor of economics and finance at Rhode Island State College.

Andreas George Papandreou has been appointed teaching fellow in economics at Harvard University for 1942-43.

J. F. Parkinson resumes his duties as professor in the department of political economy at the University of Toronto after a year's leave of absence spent with the government at Ottawa.

A. S. Patrick has been appointed assistant professor of secretarial training in the College of Business and Public Administration, University of Maryland.

Gardner Patterson, formerly teaching fellow and tutor in economics at Harvard University, is now with the Treasury Department at Washington.

W. Nelson Peach, formerly of the department of economics at the University of Texas, is on the research staff of the Federal Reserve Bank of Dallas.

Katherine Perring is now serving as housing economist with the Federal Housing Administration.

M. Ogden Phillips of Washington and Lee University was visiting professor of economic geography during the summer session at Columbia University.

A. W. Pierpont of the University of North Carolina is with the Office of Price Administration in Jacksonville.

Roy A. Prewitt, associate professor of economics at Central Missouri State Teachers College, has been granted a leave of absence to accept a position with the Division of Tax Research of the Treasury Department, Washington.

Leland D. Pritchard, formerly of Iowa State Teachers College, has been appointed assistant professor of finance in the School of Business, University of Kansas.

Clifford Pruefer, formerly a products unit head in the Zinc, Lead and Tin Branch of the Office of Price Administration, Washington, has been commissioned as a Lieutenant (j.g.) in the Naval Reserve.

Claude E. Puffer, associate professor of economics at the University of Buffalo, has been appointed acting dean of the School of Business Administration and acting chairman of the department of economics.

J. Freeman Pyle, formerly dean of the Robert A. Johnston College of Business Administration and head of the department of economics at Marquette University, has been appointed dean of the College of Business and Public Administration of the University of Maryland.

B. U. Ratchford is on leave from Duke University and is serving as State Price Executive for North Carolina in the Office of Price Administration.

E. G. Rayson of Chicago has been appointed professor of accounting in the College of Business and Public Administration, University of Maryland.

Nathan Reich has been appointed acting chairman of the department of economics of Hunter College.

Lloyd G. Reynolds, associate professor of political economy at Johns Hopkins University, is now chief economist with the Planning Division of the War Manpower Commission.

Mrs. Winifred W. Riefler has been appointed part-time instructor in economics at New Jersey College for Women.

John W. Riley, Jr., assistant professor of sociology, has been granted partial leave of absence from New Jersey College for Women to undertake research for the Office of War Information.

J. Wilson Rogers has been appointed an instructor in industrial management at the University of Kansas School of Business.

Brooks A. Sanderson has been appointed assistant professor of accounting at Rhode Island State College.

Fred Hugo Sanderson has been appointed teaching fellow in economics at Harvard University for the first semester of 1942-43.

George W. Sanford of Case School of Applied Science has been promoted to the rank of associate professor of economics.

Arthur Schweitzer has been promoted to assistant professor of economics and sociology at the University of Wyoming.

Alfred Seelye, instructor in marketing in the School of Business of the University of Kansas, has been given a leave of absence to serve as assistant head of the Commodities and Services Division of the Dallas regional office of the Office of Price Administration.

Edward S. Shaw of the department of economics, Stanford University, has taken leave of absence to serve in the Office of Price Administration, Washington.

Edward C. Simmons, assistant professor of economics at the University of Michigan, has taken a position in the Office of Alien Property Custodian, Washington.

Carel Jan Smit has been appointed as visiting lecturer on economics and tutor at Harvard University for the year 1942-43.

Harlan Smith of the University of Chicago, has been appointed teaching fellow and tutor in economics at Harvard University for the year 1942-43.

R. Elberton Smith has left the War Production Board and has been commissioned a Lieutenant (j.g.) in the Naval Reserve, on duty at the Office of Procurement and Material, Navy Department, Washington.

Victor E. Smith, formerly at Northwestern University, is now assistant professor of economics at Yale University.

Harold M. Somers has been appointed assistant professor of economics at the University of Buffalo.

E. D. W. Spingarn, formerly instructor of economics at Trinity College, Hartford, is now a Lieutenant in the Army, stationed in India.

C. P. Spruill, professor of economics at the University of North Carolina, has been given a leave of absence to serve as a Major in the Army Quartermaster Corps.

R. L. Stallings, Jr., instructor in accounting at the University of North Carolina, has been commissioned in the Navy Supply Corps.

George W. Stocking has resigned his position as director of the Fuels Division of the Office of Price Administration to resume his position as professor of economics at the University of Texas.

John A. Stovel has been appointed teaching fellow in economics at Harvard University for the year 1942-43.

Maxine Y. Sweezy, assistant professor of economics at Vassar College, is on leave for the year 1942-43 to serve as senior economist for the Office of Price Administration in Washington.

W. Lou Tandy has resigned as professor of economics at Eureka College and has accepted a position as assistant professor of economics at the University of Toledo.

Albion C. Taylor, dean of the Marshall-Wythe School of Government and Citizenship of the College of William and Mary, has been granted a leave of absence while acting as principal employment analyst for the War Manpower Commission, Washington, D.C.

Ralph B. Thompson has been appointed instructor in business administration in the College of Commerce of Louisiana State University.

Robert Triffin, formerly instructor and tutor in economics at Harvard University, is now with the Federal Reserve Board in Washington.

Randall W. Tucker, instructor in accounting at Rhode Island State College, has resigned and is now a lieutenant in the Navy.

Andrew Tully has been appointed instructor in economics at Vassar College for the year 1942-43.

Arthur R. Upgren, professor of economics at the University of Minnesota, has been appointed vice president of the Federal Reserve Bank in Minneapolis, where he will direct research projects.

Willard B. Van Houten, instructor in economics at Yale University, is on leave of absence while serving with the War Shipping Administration, Washington, D.C.

Ralph M. VanMetre, recently at Butler University, has been appointed instructor in economics and transportation in the College of Business and Public Administration, University of Maryland.

Jacob Viner, professor of economics at the University of Chicago, is visiting professor of economics at Yale University, where he is teaching international economics and doing research work at the Institute of International Studies.

J. M. Waller, instructor in business law at the University of North Carolina, has entered military service.

W. Allen Wallis of the department of economics, Stanford University, has taken leave of absence to engage in war research in New York City.

Miriam E. West, assistant professor of economics, has been granted a continuation of her leave of absence from New Jersey College for Women in order to serve as a director of statistical investigation for the War Production Board.

Bayard O. Wheeler has been appointed acting associate professor of economics and business at the University of Washington.

A. C. Whitaker of the department of economics, Stanford University, has retired and become professor of economics, emeritus.

Irvin Youngberg has been appointed an instructor in economics at the School of Business, University of Kansas.

Hans Zeisel, formerly statistical investigator for Market Research Company of America, has been appointed instructor in economics at New Jersey College for Women.

T
the
offi
T
the
a ce
desc
thos
num
C
soci

Ban
prin
with
or i
busi
pany
App
$6,0
part
inter
grou
and

Publ
1931
Num
prog

Theo
Vien
resea
now
unive

Theo
B.S.
of ex
differ

Elem
histo
and
nomi
expen
of tea
subje
Aven

Theo
Dr. o
mand
Desir

VACANCIES AND APPLICATIONS

The Association is glad to render service to applicants who wish to make known their availability for positions in the field of economics and to administrative officers of colleges and universities and to others who are seeking to fill vacancies.

The officers of the Association take no responsibility for making a selection among the applicants or following up the results. The Secretary's Office will merely afford a central point for clearing inquiries; and the *Review* will publish in this section brief descriptions of vacancies announced and of applications made. It is optional with those submitting such announcements to publish name and address or to use a key number.

Communications should be addressed to: The Secretary, American Economic Association, Northwestern University, Evanston, Illinois.

Vacancies

Bank Economist: Wanted, a man, 35 to 42 years of age, formally educated in the principles of orthodox economics and their application to finance and business, with several years of experience as an economist for either banks, trust companies, or investment counseling firms. Work consists of preparing summaries of current business and economic publications, reporting to and counseling with the company's officers on business economy, as well as writing a monthly business letter. Applicant should be reasonably draft free by virtue of dependents. Beginning salary $6,000 to $10,000, with prospects of advancement to vice-presidency of the department. Institution is a large bank and trust company in Chicago. Expression of interest in position may be made by wire, collect. Summary of experience, background, and personal qualifications, with photograph, should be sent to Booz, Allen, and Hamilton, 135 South LaSalle Street, Chicago, Illinois.

Teachers Available

Public control of business, transportation, public utilities: Man, 37, married, Ph.D., 1931, Harvard. Thirteen years of teaching experience in universities and colleges. Numerous publications in economic and legal periodicals; price control research in progress. Employed, but desires professional advancement. E105

Theory, economic history, labor, production management: Man, 39, Ph.D., 1934, Vienna. Widely traveled; speaks French, German, Italian, Czech. Has teaching, research (research fellow at the University of Chicago), and writing experience; now professor in small American college. Desires teaching or research position in a university or college or other suitable employment. Available in January, 1943. E125

Theory, finance, transportation, marketing and consumption: Man, 53, married, B.S. and M.S. in economics, plus 1 year of graduate study in theory. Eighteen years of experience in teaching and research in college. Employed but wishes to change to different climate. Available in July, 1943. E131

Elementary economics, business cycles, money and banking, advanced economic theory, history of economic thought: Man, 38, married, Ph.D., 1929, Stanford (in geology and paleontology); M.A., 1936, University of California at Los Angeles (in economics), equivalent of Ph.D. work in economics from writing an elementary text; experience in commercial geological exploration and in government service; 5 years of teaching experience, 3½ in economics; now teaching but desires work more in the subject fields listed above. Available in June, 1943. H. R. Gale, 449 East Montecito Avenue, Sierra Madre, California.

Theory, economic history, labor, money, international economics: Man, 44, married, Dr. of Polit. Econ., University of Vienna, Wieser, Mises. Widely traveled. Has command of French, German, Czech languages. Research, writing, and teaching experience. Desires teaching position. E181

Statistics, industrial management, economic theory: Man, 37, married; Ph.D., 1937, Wisconsin. Eight years of teaching experience; 1 year of experience as private accountant. Employed but available immediately. E182

Economic problems: Man, 65, married, A.B., 1907, West Virginia, M.A., 1916, Ph.D., 1924, Columbia; a year of graduate study in economics, statistics, and sociology and a year of postdoctoral research in the field. Has had 3 years of experience in teaching college classes in economics. Recently resigned from presidency of small college in serious financial condition. Desires to get back into teaching. Available immediately. E183

Economics, money and banking, finance, investments, statistics, accounting principles: Man, 34, Ph.D., 1938, Iowa. Business experience. Now professor of business administration in small college. Desires position offering professional advancement, research opportunities. Available second semester, 1942-43, or September, 1943. E184

Revised Edition

ECONOMIC PRINCIPLES PROBLEMS AND POLICIES

By William H. Kiekhofer, Ph.D.
University of Wisconsin

Outstanding for its logical organization and systematic treatment, its skilful interweaving of principle and application, its clear, well-balanced doctrine, and its variety of pertinent case illustrations, this up-to-date first-year text has a special appeal for students because of the human interest which permeates the entire book. The revised edition takes into account recent developments in theory and practice and includes new material on such topics as labor, exchange, consumption, and saving. Special attention is given to the conflict of rival economic interests. *Student's Edition, $4.00.*

A significant and timely study

THE ECONOMICS OF TOTAL WAR

By Henry William Spiegel, J.U.D., Ph.D.
Duquesne University

The impact of modern warfare upon all phases of economic life is the subject of this penetrating analysis. The first book to deal with all the complex aspects of the subject, it includes discussions of such topics as the economic causes, means, and results of war, the nature of total war, the proposed New Order in Europe, the price system in wartime, foodstuffs in the military economy, and wartime control of production and consumption. Although the main emphasis is on the effect of war on the economy of the United States, the experiences and problems of other countries in meeting wartime conditions are given attention, and the fundamental principles which govern war economics are stressed throughout. The book is adapted for use as a text in courses in war economics, etc., and for the second semester of courses in the principles of economics or in contemporary economic problems. 410 pages. $3.00.

D. APPLETON-CENTURY COMPANY
35 West 33nd Street **New York, N. Y.**

Notice to Members . . .

The annual meeting scheduled for Cleveland, December 29-31, has been cancelled in response to the request of the Office of Defense Transportation to civilians to limit travel during the holiday period to that definitely required by the war effort.

Most of the major sessions will, however, be presented in Washington, D.C., at the auditorium of the United States Department of Commerce and other suitable meeting places during the afternoons and evenings, January 4 through January 9. The annual volume of Proceedings will be published in the regular way.

Business sessions of the Association can be legally adjourned from Cleveland to Washington and it will be possible to assemble a quorum of the members of the Executive Committee.

Edwin G. Nourse
President

James Washington Bell
Secretary

THE AMERICAN
CONOMIC REVIEW

E XXXII DECEMBER, 1942 NUMBER 4

The JOURNAL of

THE AMERICAN ECONOMIC ASSOCIATION

THE AMERICAN ECONOMIC ASSOCIATION

Founded in 1885

OFFICERS

President Edwin G. Nourse, The Brookings Institution, Washington, D.C.
Vice Presidents Frederick B. Garver, University of Minnesota
Frank D. Graham, Princeton University
Secretary-Treasurer James W. Bell, Northwestern University
Counsel John E. Walker, Washington, D.C.

EXECUTIVE COMMITTEE

Elected Members J. Douglas Brown, Princeton University
George W. Stocking, University of Texas
Stacy May, Rockefeller Foundation
Edwin E. Witte, University of Wisconsin
William L. Crum, Harvard University
Leonard L. Watkins, University of Michigan

Ex-Officio Members The President
The Vice Presidents
The Secretary-Treasurer
The Managing Editor
The three ex-presidents who have last held office
(Jacob Viner, Frederick C. Mills, Sumner H. Slichter)

Correspondence relating to the Papers and Proceedings of the annual meeting, to the Director and to memberships, subscriptions, and all business matters should be addressed to Jame Washington Bell, Secretary of the American Economic Association, Northwestern Universit Evanston, Illinois.

THE AMERICAN ECONOMIC REVIEW

Published by the American Economic Association

MANAGING EDITOR

Paul T. Homan

Mary Connally, Assistant

BOARD OF EDITORS

Howard S. Ellis, University of California
Albert G. Hart, Iowa State College
Elbert A. Kincaid, University of Virginia
Ben W. Lewis, Oberlin College
Mabel Newcomer, Vassar College
Dale Yoder, University of Minnesota

The American Economic Review is published four times a year, in March, June, September, an December, at 450 Ahnaip Street, Menasha, Wisconsin. It is sent to all members of the Asso ciation as one of the privileges of membership, $4.00 of each year's dues being in payment o a year's subscription. Dues and subscription rate are $5.00 a year; the price of single copie is $1.25.

Manuscripts, book reviews and general correspondence in connection with the Review should b sent to the Managing Editor, Paul T. Homan, at the temporary office of the Review, th Brookings Institution, 722 Jackson Place, N.W., Washington, D.C.; or to members of th Board of Editors.

Books for review and periodicals should be sent to the Managing Editor, at the permanent offic of the Review, McGraw Hall, Ithaca, New York.

Applications for permission to quote from the Review should be addressed to the Secretary of the American Economic Association, Northwestern University, Evanston, Illinois.

The articles published in the Review and in the Proceedings are indexed in Reader's Guide t Periodical Literature, New York, New York.

Entered at the post office at Menasha, Wisconsin, as second class matter. Acceptance for mailin at special rate of postage provided for in the Act of February 28, 1925, embodied in para graph 4, section 412, P. L. and R. Authorized September 13, 1928.